# DRUG & COSMETIC INDUSTRY

## OCTOBER, 1950

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FRANCIS CHILSON, Production Consultant
MILTON A. LESSER, Technical Editor
HARRY G. KELBLY, Raw Material Editor
FRANK CHILD III, News Editor
HILDA C. McCOLLOM, Art Director



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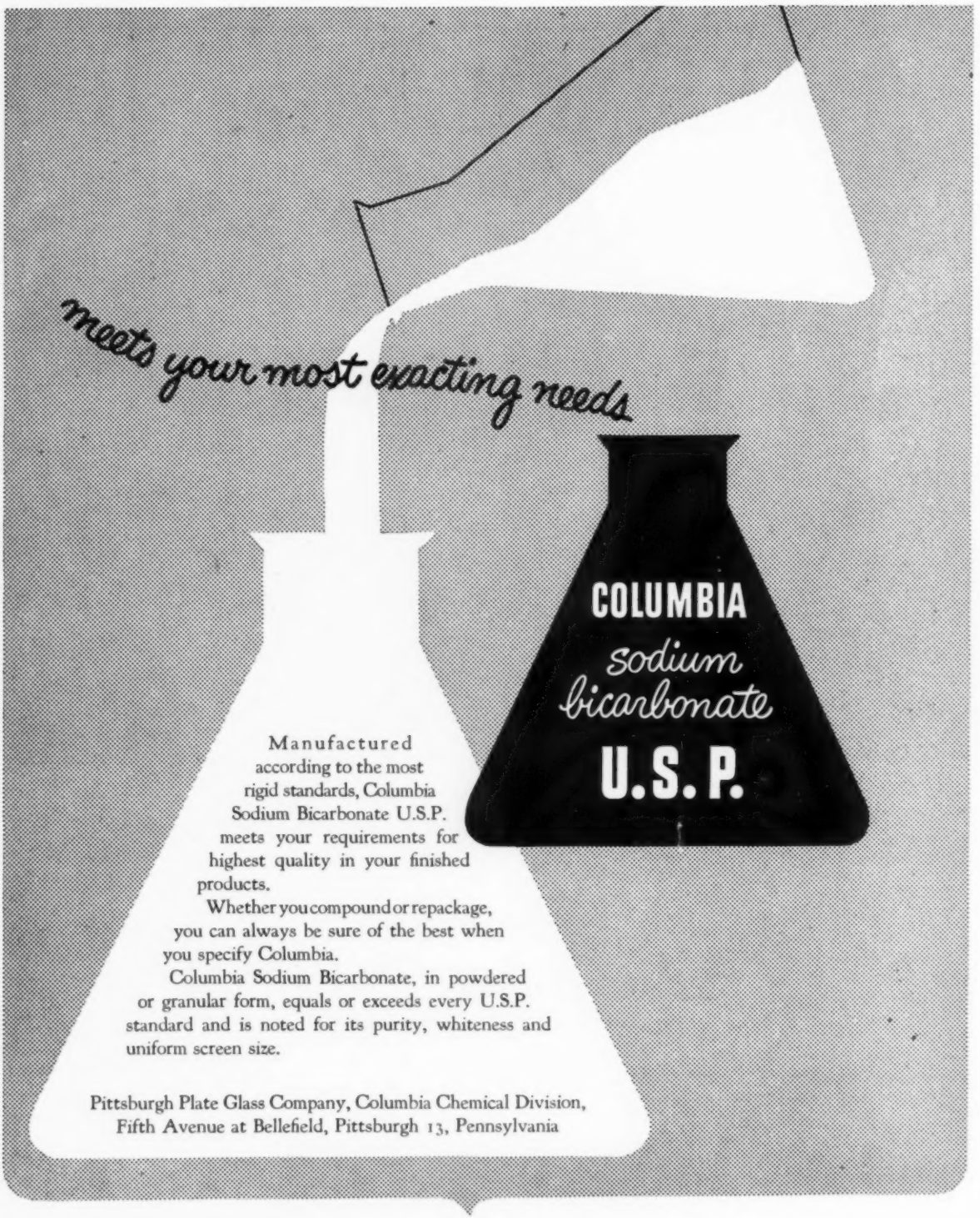


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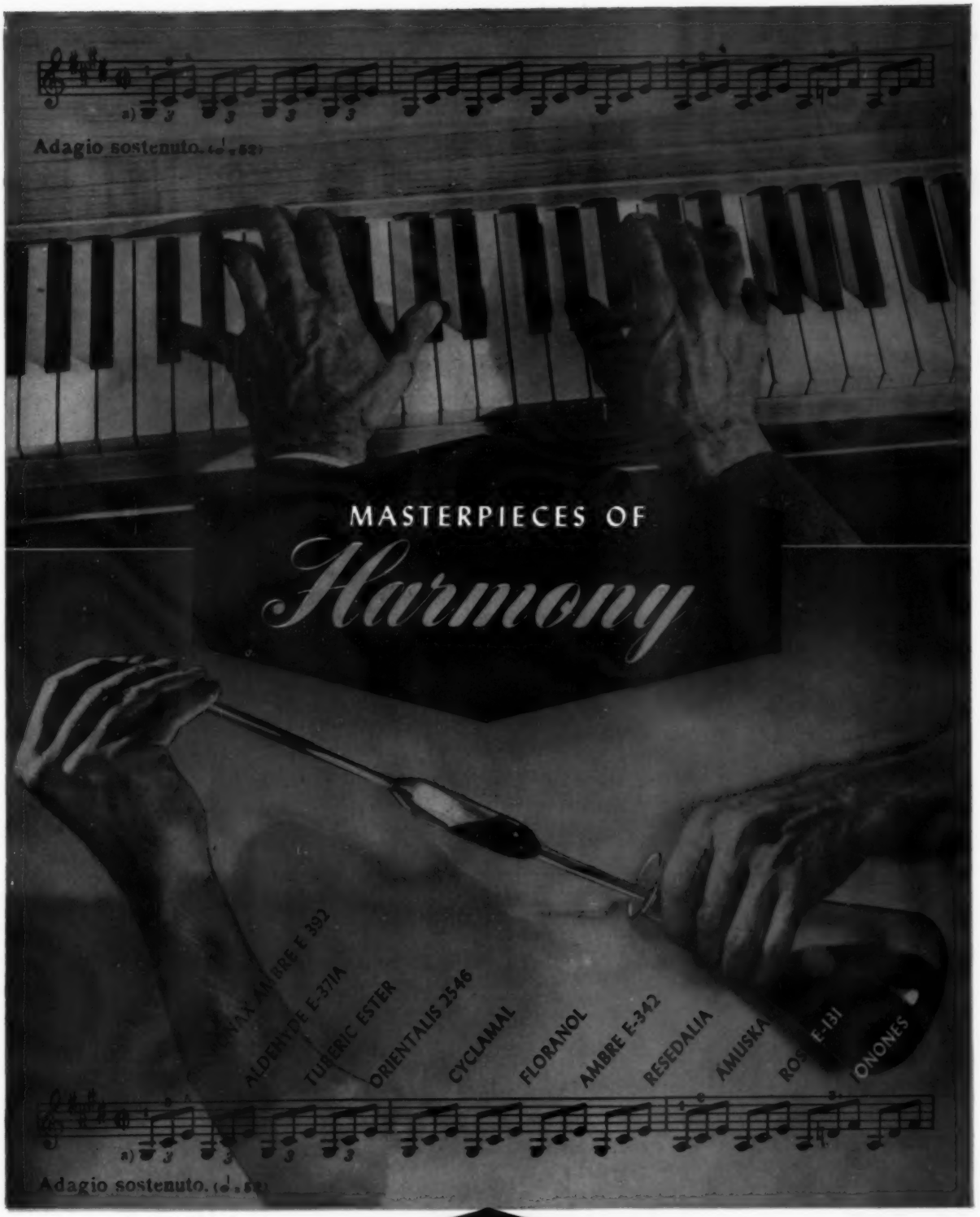


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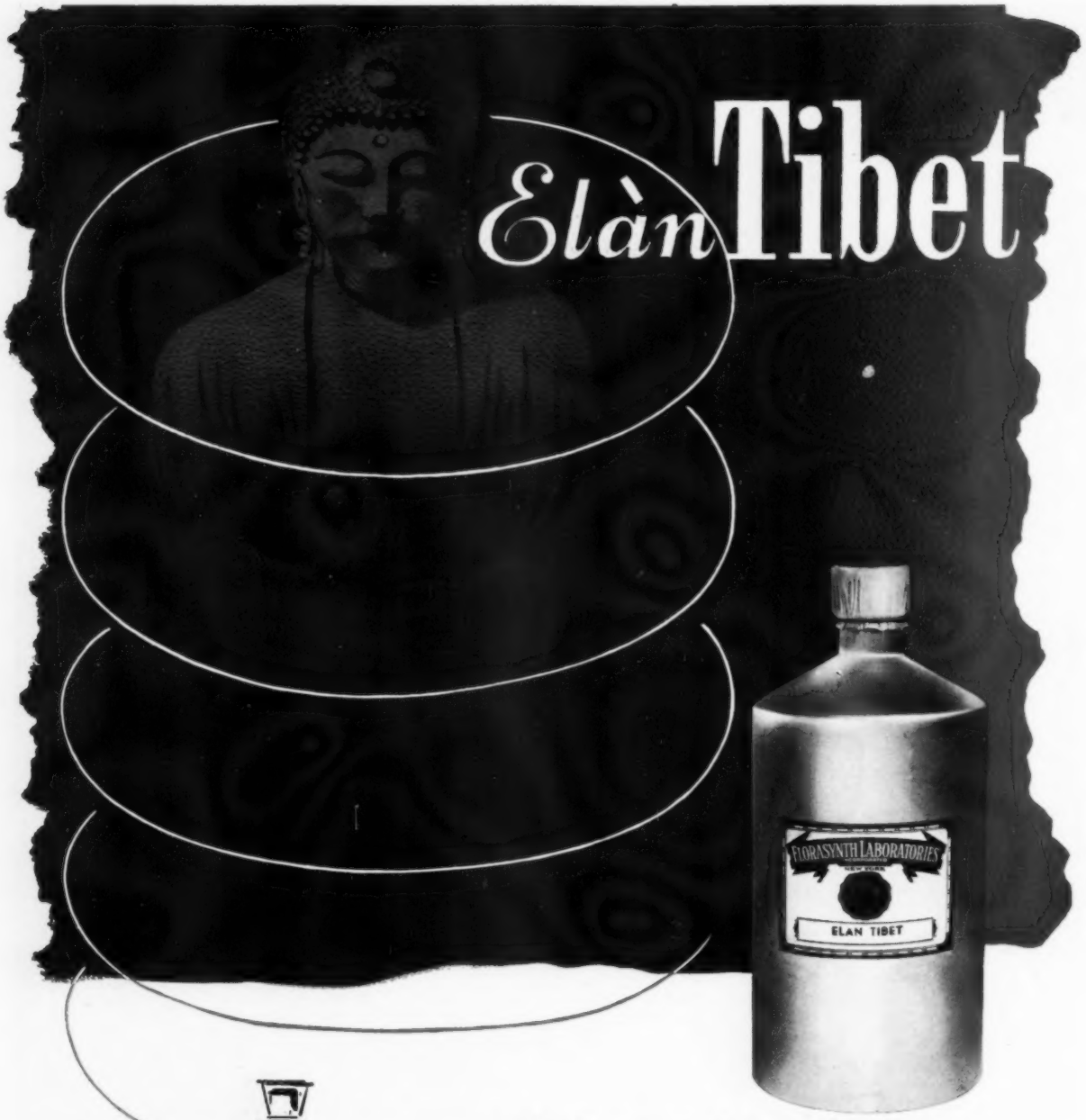


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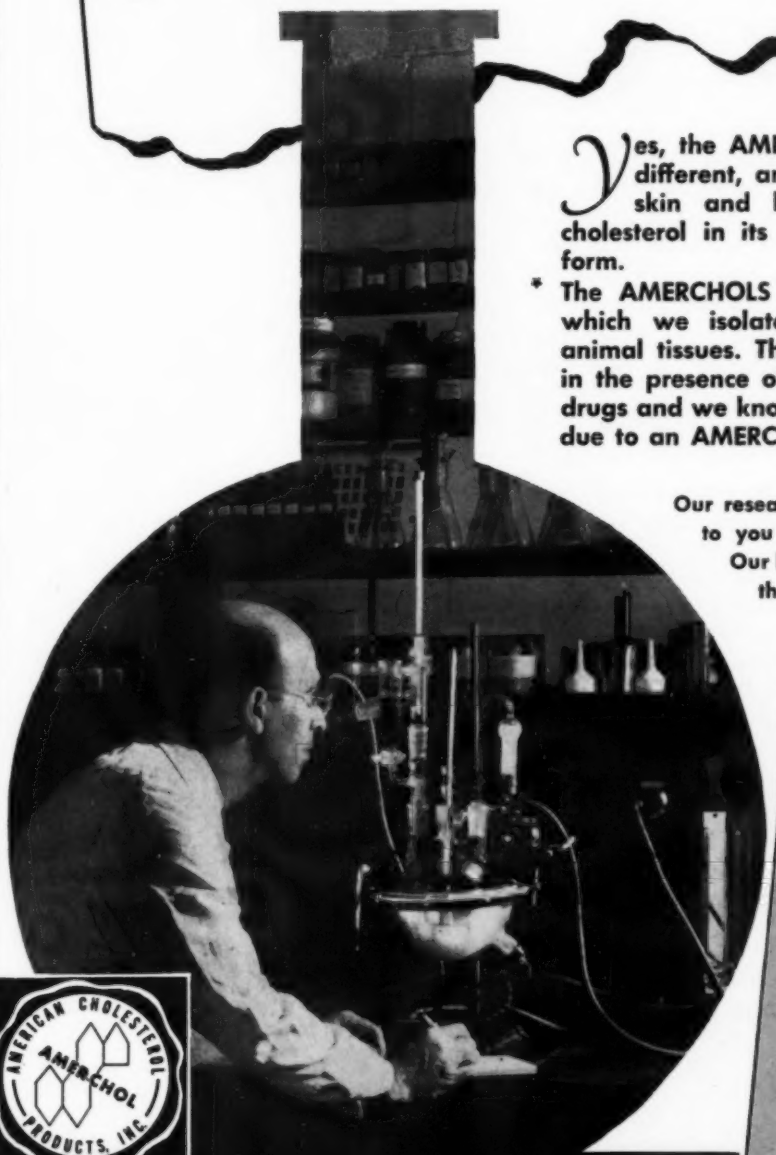

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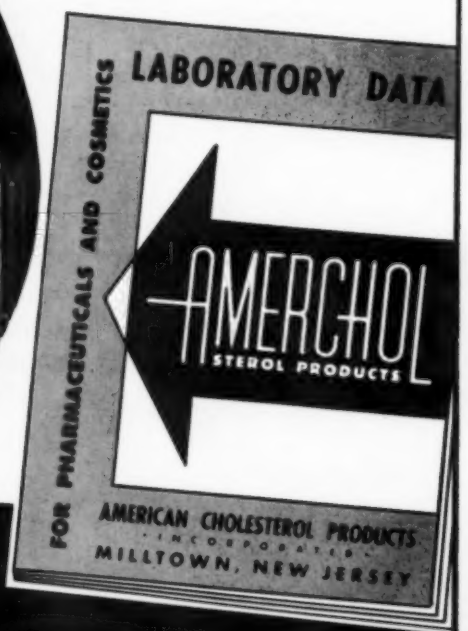


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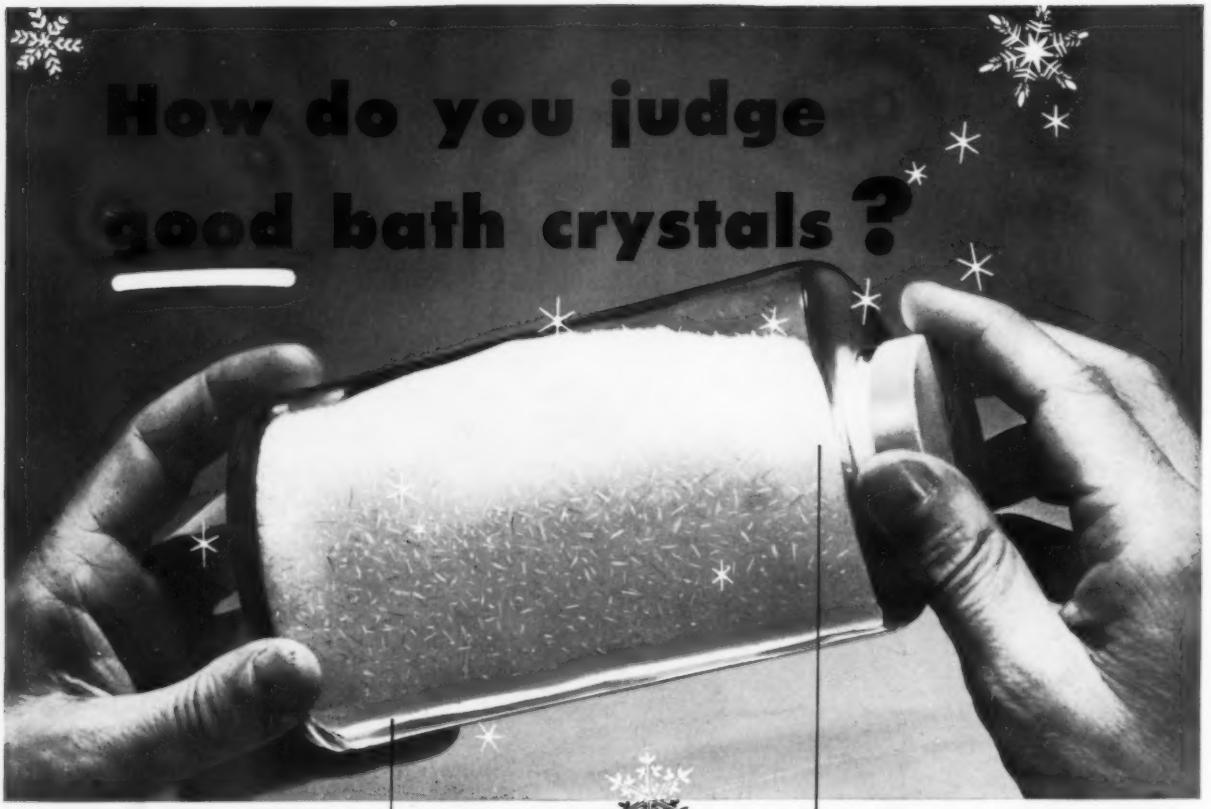


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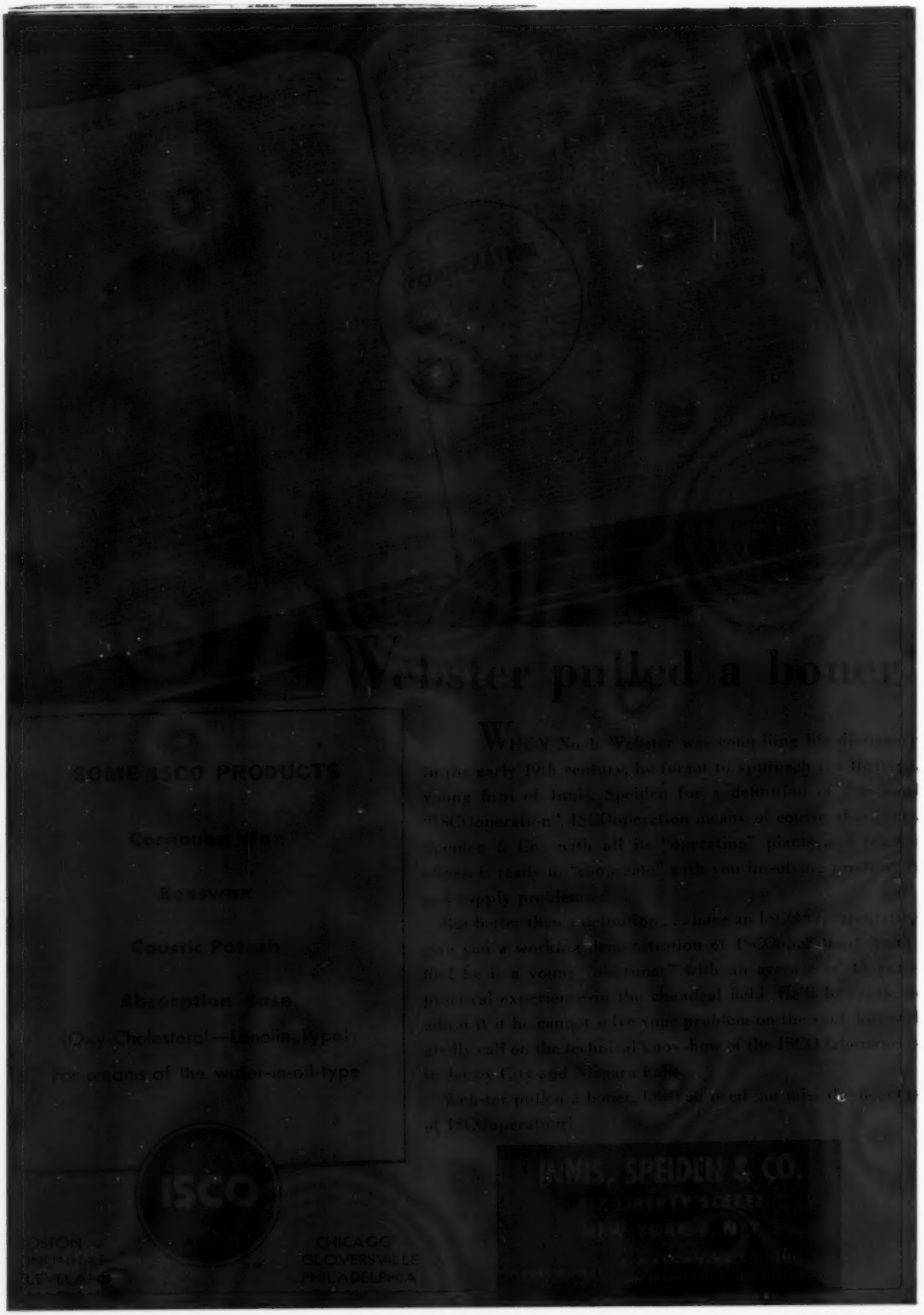
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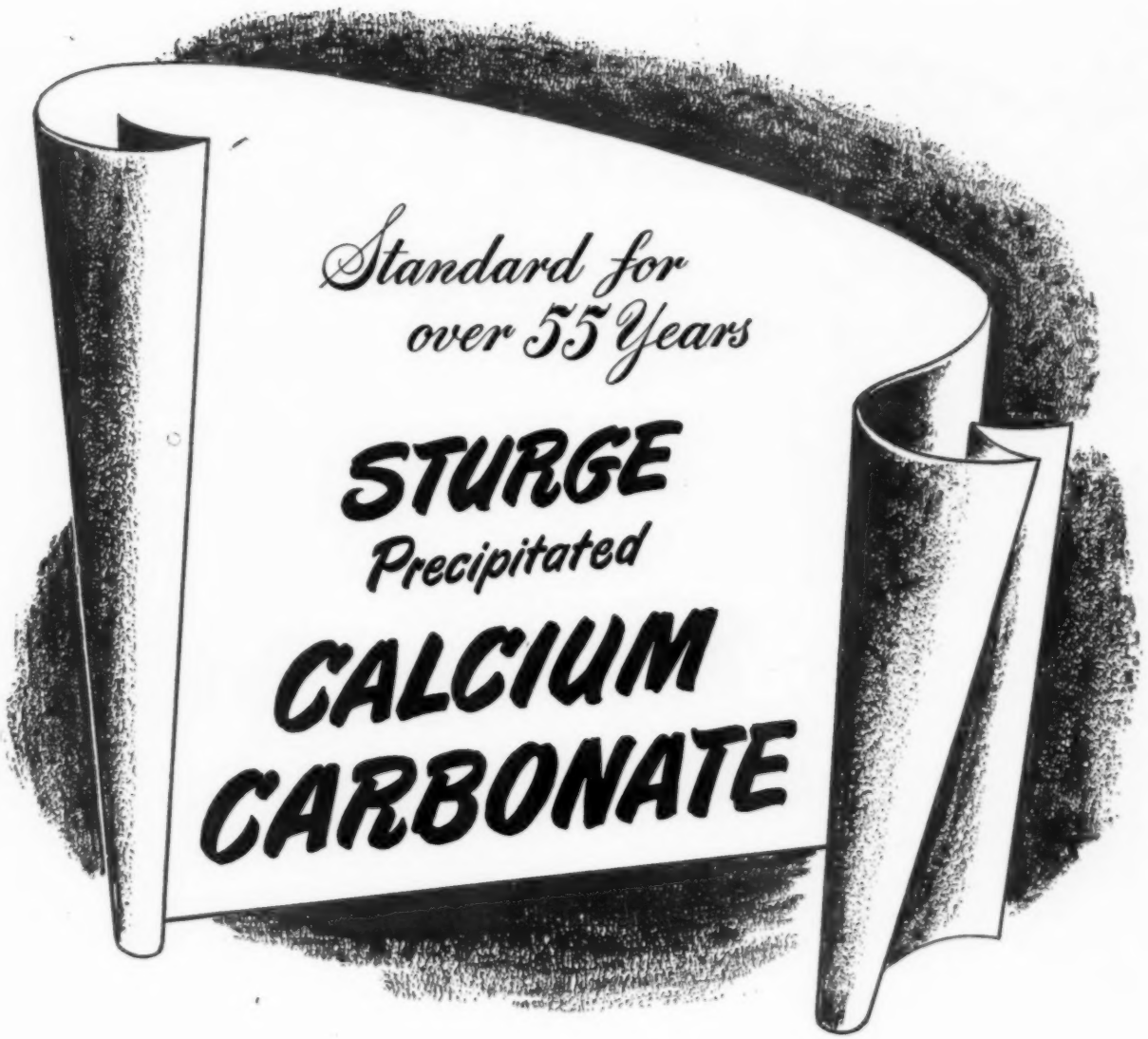


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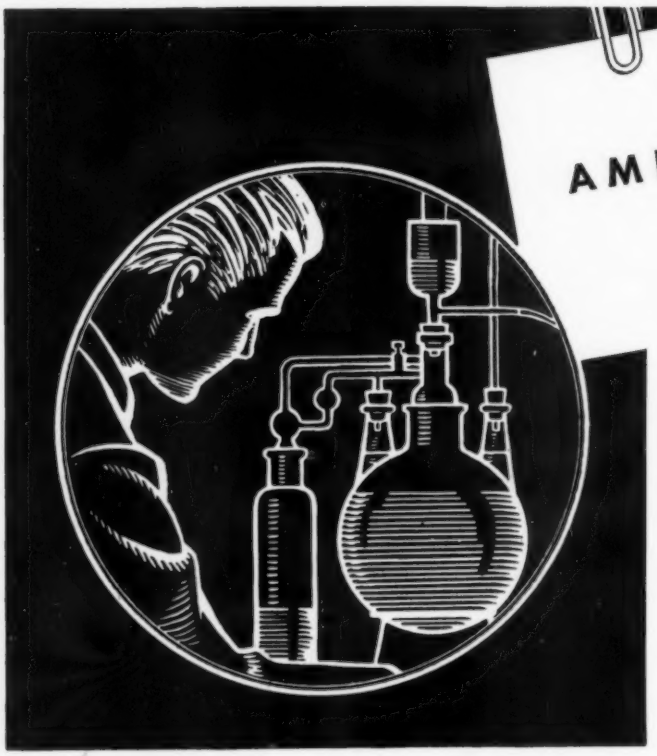

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... And all of these qualities must have been established in laboratory, clinic, and everyday practice!

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We shall be pleased to furnish samples for experimental use and to assist you in any technical problems involved.

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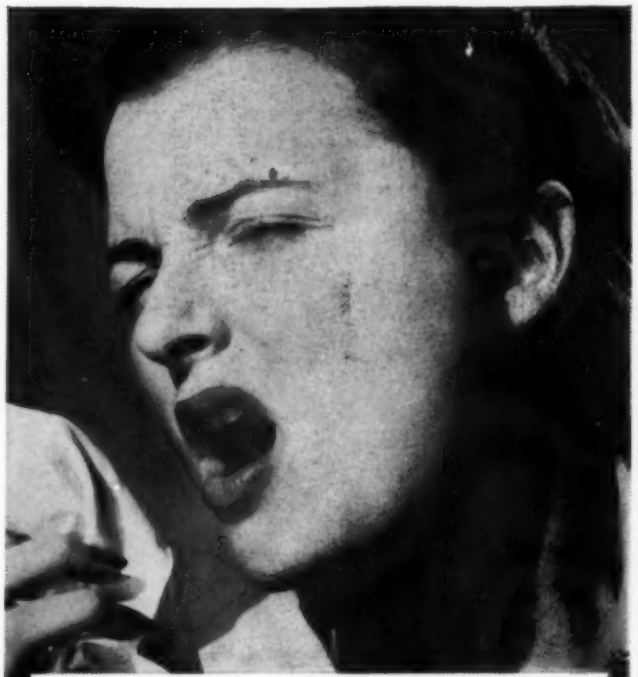

**The Expanding Role of Antihistaminic Therapy**

*... in many instances, nasal symptoms attributed to the common cold are in reality due to allergic rhinitis ...*

*... manifestations of an ordinarily nontroublesome allergic rhinitis may be aggravated by a superimposed common cold ...*

Clinicians' statements, such as these, serve to emphasize the growing year 'round importance of antihistaminic therapy. Whether intended for the relief of allergic symptoms in *perennial* or in *seasonal* allergies—antihistaminic preparations have become one of the most important product groups in the pharmaceutical field.

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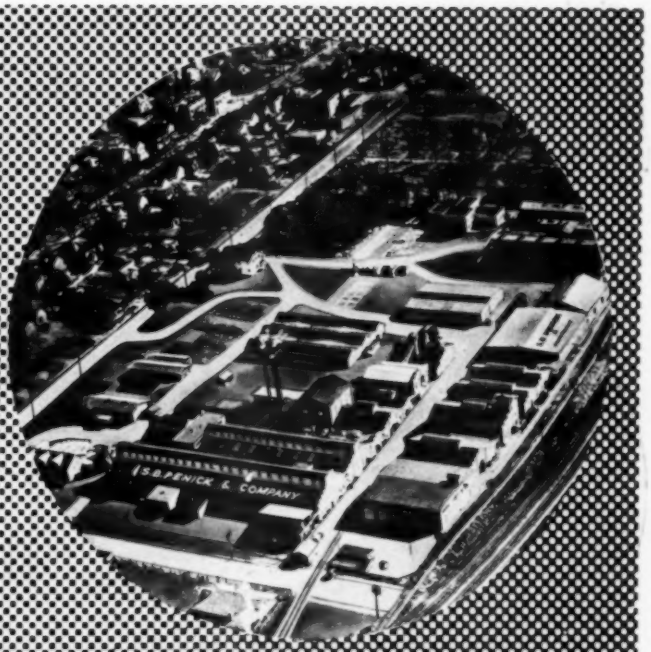


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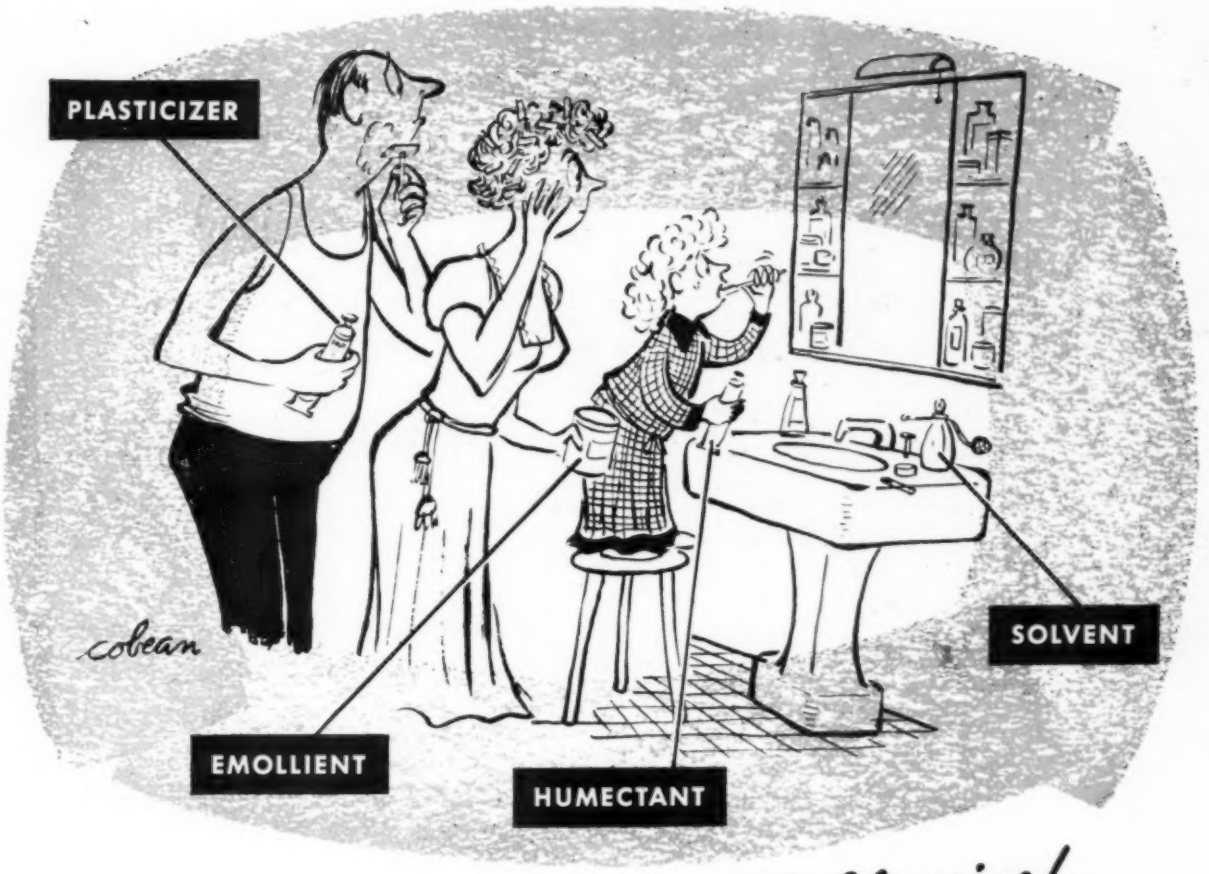


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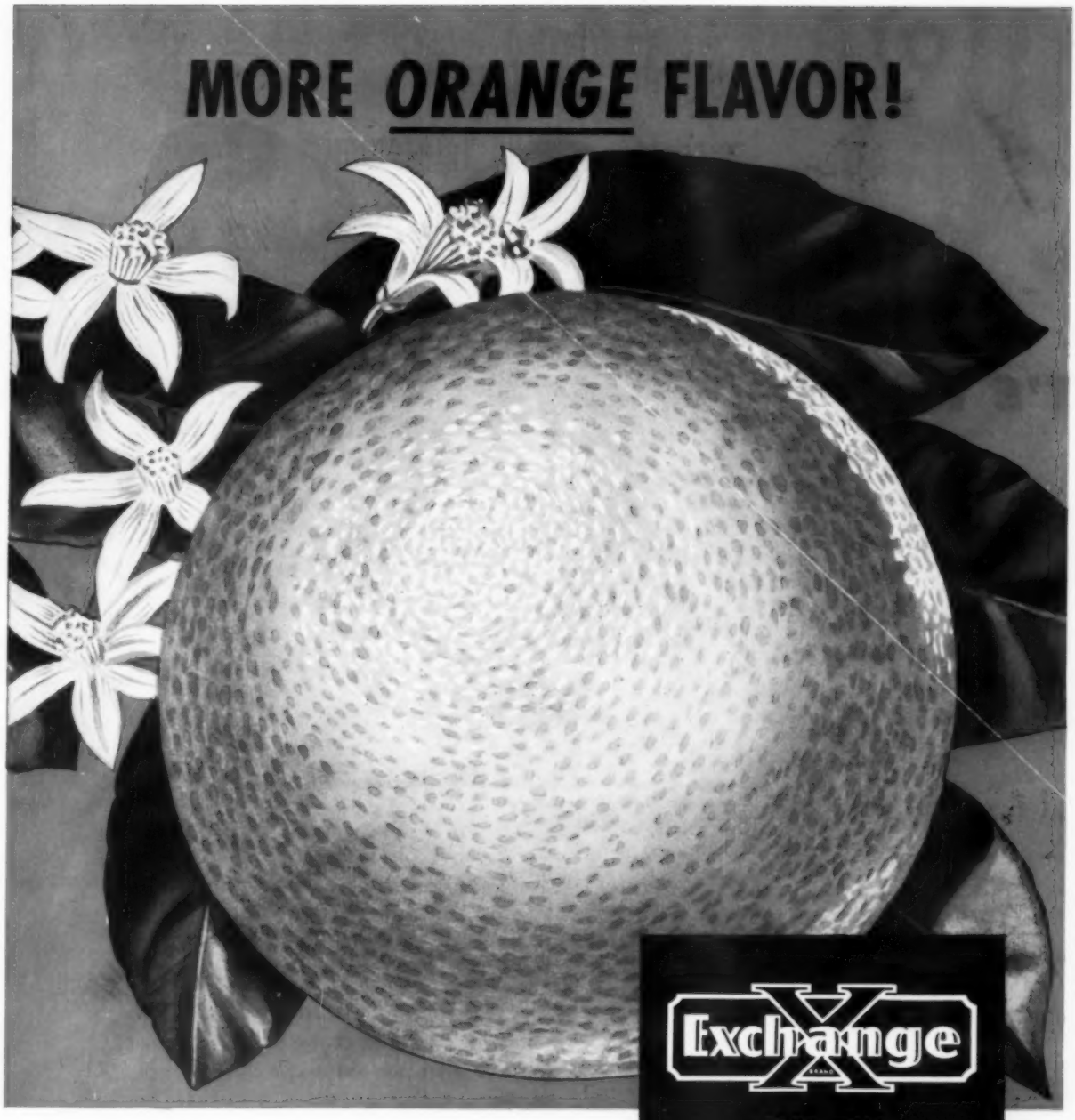


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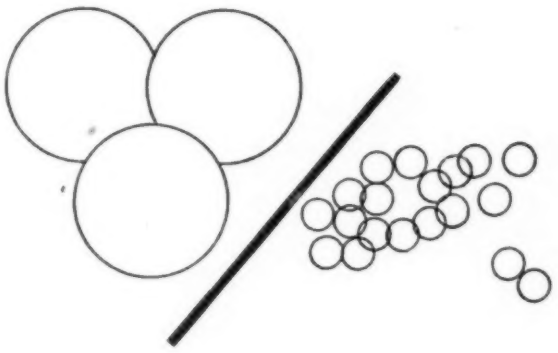

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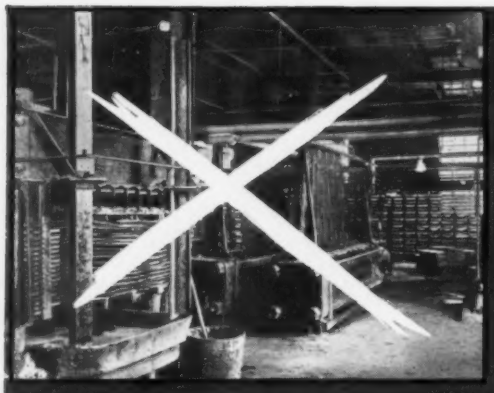

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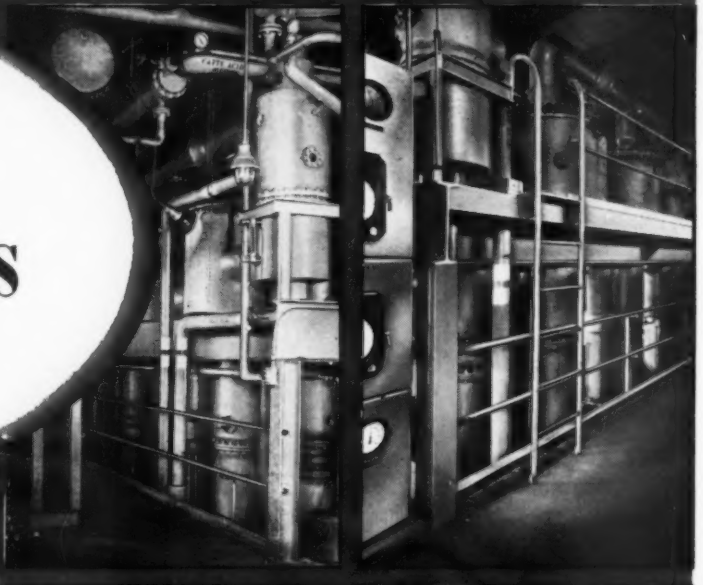

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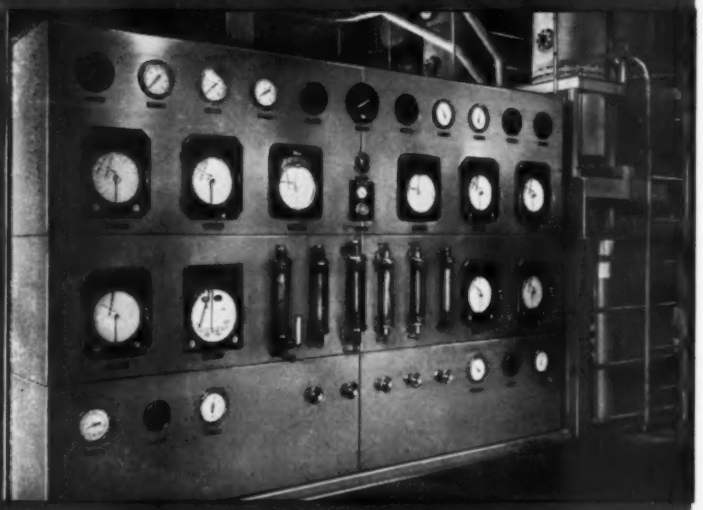

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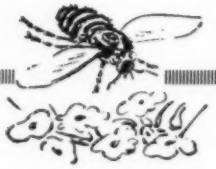

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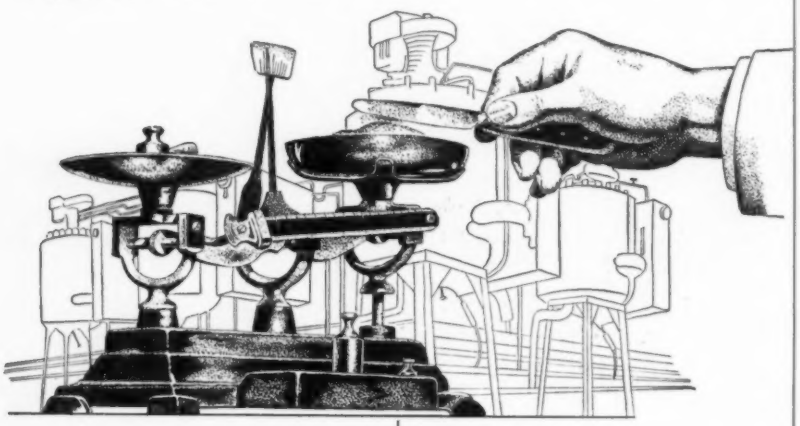

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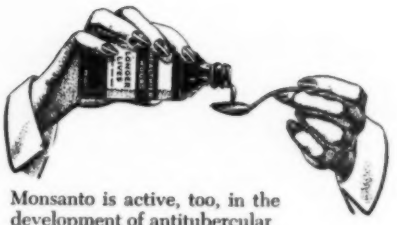

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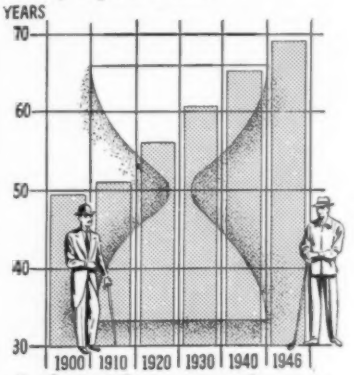


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I want a job selling perfumes and cosmetics.

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When I enter the store of any of these retailers, I am sure of a welcome based on long, friendly associations. I know the folks who do the buying; more important I know the folks who do the selling. I know how to get the attention of these folks, how to get my story over without stepping on anyone's toes.

I want to do more than just send you an order which would only mean that your goods are at rest in that store. I like to sell and my idea of selling is to keep your goods moving through the store to Miss and Mrs. Public.

I would expect you to give me a clear, concise story of your product—its quality, competitive advantages and selling points. I would need to know your advertising program, so that I can build up in the mind of these retail folks the expectation of substantial consumer interest. I want also to know about your company policies so that I can win friendly admiration for your products and your company.

I can sell perfumes and cosmetics because I know the people who in turn sell them to the public.

Let me carry the kind of message which encourages retail display for your product and friendly, informed selling behind the counter and you will soon see results in increased retail orders.

I have been selling perfumes and cosmetics for over 33 years. Any good retailer will give you a reference.

My name is BEAUTY FASHION:

Do you need a top-notch, tested, retail salesman?

"... and we can even stamp your picture on each one."

# KEEPING POSTED

### The Low Cost of High-Priced Drugs

SOMETIMES we wonder just how great has been the contribution of recent discoveries of drug products in increasing the adequacy of our existing hospital facilities through the shortening of the duration of many diseases, and, in fact, curing many of them in such a short space of time that hospitalization is often totally unnecessary. As a matter of fact the contribution of these products has also been in the direction of increasing the adequacy of the total number of physicians required, and certainly in the direction of reducing the cost of medical care through elimination or curtailment of the costs of hospitalization, nursing, and other important factors.

While we are in full accord with the belief that the selling prices of drug products should be as low as possible, and that manufacturers should lower the prices of new discoveries as rapidly as amortization of research and plant costs will permit, we do not believe that the general public has a full realization of the the relatively small price they are paying for many drug preparations even though the cost at the drug store sometimes appears staggering. We know of no manufacturer in the drug field who attempts to keep prices high because he wishes to mulct the suffering public. Rather do we know that the very large majority of them realize that the lowering of prices of these drug preparations to bring them within reach of as many sufferers as possible is just plain common sense in the building and maintenance of any business.

Everyone associated with this industry in any way—manufacturing, wholesale, or retail—should do everything they can to educate the public on these facts. They should constantly impress upon people the much higher costs and the greater suffering that accompanied certain illnesses before these somewhat apparently high-priced drugs cured them in such a short space of time with greatly reduced overall costs and much less suffering on the part of the patient and his family.

### The Government Wants Alcohol

SHARPLY increased alcohol production is being demanded by the Government for greatly increased production of butadiene for all-out production of synthetic rubber. The seriousness of the situation has the Government even contemplating the possibility of cutbacks in stocks or consumption of the beverage alcohol industry. Alcohol is needed very shortly for 100,000 tons or more annual butadiene capacity. Union Carbide and Koppers Company have been ordered to proceed with all speed to put the butadiene plants in operating condition. Therefore, alcohol, the chief raw materials for these plants must be available within a few months.

In prospect is the diversion of alcohol produced at Government-owned plants at Muscatine, Iowa, Kansas City and Omaha. The only one of these plants now in operation is the one at Muscatine. The others have been leased to private operators but will not be in production for some months. The combined annual yield is 43 million gallons.

The industry must supply about 130 million gallons by opening plants and putting current plants on an around the clock basis, using corn—an estimated 60 million bushels—as raw material. Of the nation's 600 million gallon annual production capacity, 175 million gallons are going into distilleries as neutral spirits, and an equal amount into industrial alcohol; 43 million gallons comes from only partially reactivated plants; and about 200 million gallons of the capacity is idle. The plants representing the 200 million gallon idle capacity are scattered throughout the country, mostly as small units. Some of them are geared to molasses as a base material, but more molasses to operate these plants is said not to be available. However, the Agriculture Department, pending completion of its raw material analysis, believes enough corn will be available from its stocks to produce 50 to 60 million gallons of alcohol. This corn would be moved out by normal turnover in stocks due to deterioration in storage.

As a result of the tightness in alcohol, five million gallons are being brought in from Finland. This is alcohol produced from sulfite liquors. The molasses situation has reversed itself from a year ago and is now firm at 20 cents.

### Volwiler on Antibiotics

ABBOTT President Ernest H. Volwiler, president of the American Chemical Society, reviewed trends in pharmaceutical research on the anniversary of the founding of the A. C. S. With regard to antibiotics, he said in part:

"Penicillin, because of its high efficacy and low toxicity, remains by far the most widely used of all antibiotics. Our country's production in 1949 amounted to 80 tons of the pure crystalline product and the cost of manufacture has been reduced to about one per cent of what it was in 1943. Sufficient penicillin is being produced by U. S. manufacturers to supply all our growing needs plus large amounts for export; yet the world demand has risen so much that still more production is called for."

Streptomycin and dihydrostreptomycin, in their more limited field, particularly for tuberculosis, were also produced at an 80 ton rate last year; the production rate this year is higher. There still existed a need for new antibiotics for use in diseases where penicillin and streptomycin are less efficient, notably typhoid fever, virus pneumonia, dysentery and typhus. Fortunately, the newer antibiotics, chloromycetin, aureomycin and terramycin, have been developed to meet these needs. Even yet there are others, such as tyrothricin and bacitracin, with more limited uses. It is to be expected that still newer antibiotics for specialized purposes will be developed, although penicillin and the other available products cover so many of the requirements of the physician that a new product to be successful, will need to have outstanding advantages.

### A.D.M.A. Opposes WHO Action

A RESOLUTION passed be the Executive Committee of the American Drug Manufacturers Association objects to action of the "Expert Committee on the Unification of Pharmacopoeias of the World Health Organization to devise methods for establishment of generic names for all new drugs. The A.D.M.A. claims that this is the right of those who discover and introduce these new products. The resolution reads:

WHEREAS the "Expert Committee on the Unification of Pharmacopoeias" of the United Nations World Health Organization at its sixth session in New York on April 20 to 29, 1950 has undertaken to devise methods for establishment of generic names for all new drugs, and

WHEREAS such action would deprive those who discover and introduce new drugs of their long recognized right to name such drugs in the public interest:

NOW THEREFORE BE IT RESOLVED that the American Drug Manufacturers Association adheres to the long established and well recognized right of drug discoverers to give generic names to such drugs; and

BE IT FURTHER RESOLVED that such activities of the International Pharmacopoeia, like those of pharmacopoeias of members of the United Nations and the American Medical Association Council on Pharmacy and Chemistry, be confined to devising appropriate generic names only in those cases where the drug discoverer is unwilling or unable to devise such a name, and

BE IT FURTHER RESOLVED that copies of this Resolution shall be transmitted to both the said Committee of the World Health Organization and to the World Medical Association with the request that each organization take appropriate steps to safeguard and insure for the public interest the right of the discoverer of a new drug to name such drug.

### Chemical Salesmen's Clinic

THE Salesmen's Association of the American Chemical Industry is sponsoring its first chemical sales clinic at the Roosevelt Hotel, New York, November 2 and 3. Attendance at the clinic is open to any member of the Association, any chemical salesman or prospective chemical salesman, and any student of chemistry in his senior year or in graduate school planning to enter sales work.

Topics to be covered in the two-day session are: selling heavy chemicals; selling fine chemicals; introducing new chemicals; service in selling chemicals; organizing salesmen's records; planning the day; the entertainment the day; the entertainment bugaboo; are sales managers people; and a look toward the future.

The cost to members of the Association is $20, to non-members, $22.50, and to students, $15. Tickets for two luncheons and one banquet are included in these charges. Registration blanks for the clinic may be obtained from Paul B. Slawter Jr., Salesmen's Association of the American Chemical Industry, 225 Park Ave., New York 17.

### Male Hormones Over-The-Counter

IN CALIFORNIA, a Federal District Court refused to restrain a retail pharmacy from over-the-counter sale of methyl testosterone in the form of 5 and 10 milligram linguets and 10 and 25 milligram tablets. The drugs, which were the products of several reputable manufacturers, were shipped to the pharmacy in packages which bore the prescription legend. The pharmacist repackaged and relabeled the drugs and then sold them on mail order in interstate commerce with labeling which called attention to the need for supervision of a physician. The court ruled in favor of the defendant on the grounds that when such drugs bear a label statement indicating to the buyer the need for consummation with a physician in administering the drugs, they bear adequate directions for use under section 502 (f) (1) of the Act even though sold over-the-counter in interstate commerce; they are not misbranded under section 502 (f) (2) of the Act since the suggestion in the labeling that they be taken in consultation with a physician constitutes adequate directions for use in those pathological conditions where their use may be dangerous to health, even though sold without a physician's prescriptions; they are not misbranded under section 502 (j) of the Act since said drugs are not dangerous to health when used in the dosage and with the frequency and duration recommended in the labeling if the drugs are taken as suggested in the labeling, namely, in consultation with a physician, even though sold without a physician's prescription; and they are not misbranded under section 520 (a) of the Act since it has not been established that the daily intake of 5 milligrams of methyl testosterone in linguet form is ineffective in the treatment of male hormone deficiency.

Well, this is an entirely new line of reasoning which most certainly must be reviewed by a higher court before anyone undertakes to build up a business on this decision. Frankly, we think it is cock-eyed.

### FTC Cities Diabetes Remedy

THE Federal Trade Commission has charged Hato Co., New Orleans and its president, Charles W. Thomas with falsely advertising that Celparux will control diabetes and relieve certain conditions and

complications of that disease. The complaint alleges that Celparux does not have any therapeutic value in the treatment of diabetes or its symptoms or complications.

### Trade-mark Decisions

IN AN action brought by House for Men against Rawlings International before the Commissioner of Patents, the Commissioner held that the mark "His" may be suggestive, but is arbitrary as applied to toilet preparations. The Commissioner also decided that "His Excellency" is not confusingly similar to "His" or "His Commando." Ordinarily addition of other features to a known mark is not sufficient to avoid confusion so long as the mark so adopted remains a prominent and noticeable feature of the second mark. The exception to the rule occurs where the identity of the first mark is so lost or so completely differentiated that the similarity in sound, appearance, or meaning is lacking.

A Court of Customs and Patent Appeals decision stated that "Cafe" in "Nescafe" and "Hycafe" is descriptive of coffee so that the mark "Hycafe" in which "cafe" is disclaimed, is not confusingly similar to "Nescafe." Foreign language words, not adopted into the English language, which are descriptive of the product, are so considered in registration proceedings despite the fact that the words may be meaningless to the public generally.

The same court ruled that side-by-side comparison of marks is not a test of confusing similarity. Accordingly, it held that the mark "Mercirex" is not confusingly similar to "Rex" or "Recall."

The mark "Larium" was deemed to be confusingly similar to "Lauron," both marks being employed on medicinal compounds used in treatment for iron deficiencies and similar ailments. In determining whether confusion is likely between marks under section 2(d) of the 1946 Act, similarities or differences between both marks and goods must be considered. Cumulative differences are also considered. This decision was handed down in the case of Endo Products against Nutrition Research Laboratories.

In a Court of Appeals decision it was held that a non-fanciful word may be used by a business enterprise as its trade-mark and the trade name in circumstances where its unqualified use by another may constitute infringement or unfair trade. The ownership of the trade-mark "Sunbeam" for electrically operated household utensils does not give one an exclusive right to use the mark in the whole electrical field. Here it was held that the defendant does not infringe by using "Made by Sunbeam Electric Appliance Co., Los Angeles, California" on its fluorescent electric fixtures, since the parties do not compete.

### War Surplus and Fair Trade

IN A unanimous decision, the District Court of Appeal of California has upheld a decision of the Superior Court that the rights sanctioned by fair trade laws extend to the resale of war surplus trade-marked commodities purchased from the War Assets Administration. The Appeal Court further held that an injunction to restrain further price-cutting with respect to fair trade commodities can be issued, as it was by the lower court, to cover a broad list of the plaintiff's fair trade commodities, even though violation is proved with respect to only one, when the threat of violations in the future " is indicated because of their similarity or relation to the unlawful acts found to have been committed."

Two years ago Judge Thomas M. Foley of Superior Court granted an injunction to restrain Benatar's Cut Rate Drug Stores, San Francisco, from further violation in the sale of Dr. Lyon's Tooth Powder at prices below the minimum resale prices stipulated in Sterling's fair trade contracts in California. The defendant claimed that the material it was selling was war surplus merchandise and that, therefore, it did not come within the purview of the fair trade laws.

### Norwich Pharmacal Outlook

NORWICH Pharmacal Co. sales for the first eight months of this year totaled $8,153,000, representing an increase of $550,000 over the first eight months of 1949, Norwich President Melvin C. Eaton recently told the New York Society of Security Analysts, at a meeting which was addressed by Mr. Eaton and Howard Sumner, president of the Norwich subsidiary, Eaton Laboratories, Inc. The following information was revealed by these two speakers in their talks before the Society.

"An Advance Beyond Antibiotics," a phrase used in the professional advertising of Eaton Laboratories, is tersely descriptive of the new nitrofurazone products, principal of which is Furacin. Qualities of stability, wide spectrum applications, and a minimum of side reactions are said to be the superiorities demonstrated by Furacin over many antibiotic drugs. Also, its lower toxicity through dosage control and its simple chemical composition permit flexibility through which new disease conditions can be met. Significant also is the fact that products of synthetic chemical composition permit relatively inexpensive large-scale production. Wartime ethical drug contracts of between $3 and $5 million annually could be taken on without interfering with the company's normal production of proprietary and ethical drugs. World War II experience on contract renegotiation was favorable inasmuch as no refunds to the government were necessary.

Pepto-Bismol accounts for approximately 40 per cent of the sales of the company and for between 50 to 60 per cent of the earnings. The second most important item is Unguentine, which accounts for about 8 per cent of sales and 15 to 20 per cent of profits. Other proprietary drug products are NP-27 for athlete's foot, Amolin Cream and Powder, Zenacol, Nordex, and Swav Brushless Shaving Cream.

Eaton Laboratories turned into the profit column in 1948 with net earnings of $15,000, and in 1949 earned nearly $40,000. Further extensive research and experimentation is expected to consume a large portion of this subsidiary company's funds. Extensive research in the field of cancer has progressed to the point at which cancer growth in animals can be limited. Polio and amoebic dysentery are other diseases on which much work is being done. Furaspore, an antifungal, has proven itself effective in 80 per cent of scalp ringworm cases, and since no drug has ever been considered an effective cure for this disease, wide acceptance of Fungaspore is anticipated.

The company's best future prospects lie in the ethical field in which progress has been the most rapid during the past ten years. The company's ethical products which showed the most growth in the past ten years were entirely the result of an extensive research program. Norwich chose furon compounds as its principal field of investigation because approximately 90 per

cent of its research work was already being devoted to the possibilities in benzene, and because furon, when chemically synthesized and screened, offered many new bacteriological and pharmacological advances. The choice of concentrating on anti-fungus compounds was fortunate in that it produced several new ethical products.

### Our Multiple Seizures Article

LESTER L. Lev, one of the attorneys representing the shipper of Nutralite in the recent Mytinger and Casselberry multiple seizures case, has sent us the following letter of criticism of the article by James B. Goding which appeared in our July issue:

September 1, 1950

Dear Sir:

"Upon my return from a trip out of the State my attention was called to the July issue of "Drug and Cosmetic Industry," and particularly to the article appearing on page 34 entitled "Multiple Seizures" (the Mytinger and Casselberry case).

"As one of the attorneys representing the shipper I naturally was extremely interested in the article and, likewise, as one of the attorneys I am no doubt biased. I do believe, however, and this view is shared by a number of other persons, that the article was definitely slanted although it is apparent that the author, Mr. Goding, made a sincere attempt to be objective. His background, however made that goal a difficult one to achieve.

"My purpose in writing is to call your attention to the fact that inasmuch as your magazine is widely read, the article in question is bound to give a host of readers an erroneous idea of what the M & C case really does mean. As you probably know, the Three-Judge Court before whom the case was tried made voluminous findings, a printed copy of which is enclosed. The Supreme Court did not attack these findings in any way. It merely held that the Trial Court had no jurisdiction to go into the matters. As Mr. Justice Jackson said in his dissenting opinion, "Those findings are made largely on undisputed evidence and on evidence from government sources. This Court does not criticize or reverse any of them."

"We believe that the far reaching effects of administrative abuse of power and the misuse of the right to make multiple seizures should be brought home to every member of the industry, and the thought occurred to me that Drug and Cosmetic Industry would be interested in presenting industry's viewpoint of the effect of the decision, and of abuse of power. There are many factual misstatements in Mr. Goding's article which unquestionably were inadvertently made. They nevertheless are misleading and should be corrected. Do you not agree?"

We submitted Mr. Lev's letter to Mr. Goding and received the following reply:

"I have read Mr. Lev's letter with considerable interest. My article, of course, speaks for itself. I think I should, however, point out that Mr. Lev's disagreement with my analysis of the Mytinger and Casselberry case stems principally from his apparent unwillingness to reconcile himself to the function of the Supreme Court in our system of jurisprudence.

"This is not to say that I am totally unsympathetic to Mr. Lev's position. He and his associates achieved a tremendous victory for their client in the lower court. This victory, however, was swept away by the decision of the Supreme Court. The theme of my article, ineptly stated perhaps, is that the Supreme Court's decision is legally sound and, more important, that there are ways and means for industry to avoid the imposition by the government of the multiple seizure sanction. These ways and means are spelled out in the article.

"Mr. Lev's suggestion that my past experience as a Food and Drug Administration lawyer made it difficult for me to achieve objectivity in writing the article, brings mixed feelings. If in my present function as a food and drug specialist for industry there is detected in my writings a sympathy for vigorous enforcement by the Food and Drug Administration for the public good—then, sir, I feel complimented (though not smug). I hasten to add in all truthfulness, however, that in writing this piece I sought simply and exclusively to explain an important case to industry and how, so long as the law remains unamended, industry can best live with that law.

"Even at the risk of endangering the validity of my response to Mr. Lev's criticism by protesting too much I must add this thought. My article in a sense is merely an extension of my profound conviction that (to paraphrase the great sage, Shakespeare) more things are wrought by compliance, rather than evasion, of the food and drug law than this world ever dreamed of.

"I, of course, resent Mr. Lev's unjustifiable criticism that my article contains many factual misstatements, especially since this charge is unaccompanied by a bill of particulars."

### A.P.M.A. Sectional Meetings

THE American Pharmaceutical Manufacturers' Association, which is holding its Annual Midyear Meeting at the Waldorf Astoria Hotel, New York, November 27 to 30, has set the dates for two of its sectional meetings. The Eastern Section will hold its meeting at the Roosevelt Hotel, New York, January 29 to 31; and the Central Section will meet at the Edgewater Beach Hotel, Chicago, February 12 to 14.

### More Antihistaminic Stipulations

STIPULATION agreements have been accepted by the Federal Trade Commission from eight other manufacturers of antihistaminics who have agreed not to advertise their products as cures or preventives of the common cold. It will be recalled that earlier this year actions brought by the Commission against Anahist, Resistabs, Antamine, and Inhiston resulted in similar stipulations of the same kind being signed. The stipulations do not ban advertising statements by the companies to the effect that their antihistamine products are beneficial in the treatment of the common cold symptoms and that the preparations are safe if the user follows the directions on the labels. The products and companies affected are:

Previcol, Previcol, Inc., Albany, N. Y.; St. Joseph Anti-Histamine Tablets, Plough, Inc., Memphis; Historal, Julius Blackman Corporation, trading as Supreme Pharmaceutical Company, Jersey City; Pinex Anti-Histamine Tablets, Pinex Company, Fort Wayne, Ind.; Histonex, Allied Pharmacal Company, trading as Victor Drug Products Company, Cleveland; A-H Antihistamine Tablets, Monticello Drug Company, Jacksonville, Fla.; Orastin, Commerce Drug Company, Brooklyn, N. Y.; and C-B Antihistamine Tablets, Kirkland S. Lamb and Clyde A. Jones, trading as C-B Drug Company, Charlotte, N. C.

### Antibiotics Monthly

A NEW monthly medical publication entitled "Antibiotics" and featuring regular departments on such topics as fermentation, production, clinical aspects and pharmacology of the antibiotic drugs, will make its appearance in January 1951. The book, which will be edited by Dr. Henry Welch, director of the Antibiotics Division of the Food and Drug Administration, will be published by the Washington Institute of Medicine. In editing the book, Dr. Welch will be assisted by nearly 50 internationally known authorities including: Sir Alexander Fleming, Dr. Selman Waksman, Dr. Charles E. Dutchess (Schenley), Dr. Walton Van Winkle (AMA), Dr. Rene Dubos (Rockefeller Foundation), Dr. Maxwell Finland (Harvard), Dr. Chester E. Keefer (Massachusetts Memorial), Dr. Perrin Long (Johns Hopkins), Dr. Fordyce R. Heilman (Mayo Clinic), Dr. Wallace Herrell (Mayo Clinic) Dr. Theodore E. Woodward (Maryland U.), Dr. Guy P. Youmans (Northwestern U.), Captain Robert Babione, director of the U. S. Navy Preventive Medicine Division.

### Commercial Solvents Antibiotic Award

COMMERCIAL Solvents Corporation and the Society of American Bacteriologists have established an annual award for outstanding research in the field of antibiotics. Known as the Commercial Solvents Award, and administered by the Society of American Bacteriologists, the award will consist of one thousand dollars and a gold medal and will be conferred upon an individual or a group of individuals working in the Western Hemisphere who contribute to a better understanding of antibiotics. In selecting the winner, particular attention will be paid to the basic nature of the research upon which the award is made and its contribution to fundamental knowledge about antibiotics. The recipient will be selected by a committee appointed by the president of the society, and it is anticipated that the first award will be presented at the annual meeting of the society in Chicago in May, 1951.

### Vitamin-Mineral Stipulation

THE Federal Trade Commission has accepted Stipulation 8034 from an advertiser of a a vitamin-mineral combination containing vitamins thiamine, riboflavin, niacin in therapeutically significant quantities and other vitamins and minerals in lesser amounts. The stipulation limits the advertiser to representations concerning the value of his product in providing thiamine, riboflavin, niacin and iron, and one-third of the minimum daily adult requirements for calcium and phosphorus. It prohibits any representations which would indicate that the use of this preparation will assure good health or restore youthful feelings or appearance, and further prohibits statements to the effect that the product does not contain drugs or that it influences health without the use of drugs.

The stipulation contains a new type of statement which provides as follows:

"The corporation further agrees to cease and desist from exaggerating the frequency with which any disease, symptom or condition is due to a deficiency of vitamin $B_1$, $B_2$, iron or niacin."

The Commission has been attempting to force advertisers to include in their copy statements to the effect that certain symptoms are caused more frequently by conditions other than, for example, an iron deficiency, and that under such circumstances the product under consideration would not be of value in relieving the particular symptoms. An appeal from an Order making such a requirement, the Circuit Court of Appeals ruled against the Commission. Apparently the inclusion of the above statement in this stipulation is an attempt to circumvent the order of the Circuit Court in this other case.

This statement means that in the future advertising copy should not contain representations which indicate that certain symptoms are frequently the result of a certain deficiency unless this fact can be established by substantial evidence. It means that in the future an advertiser cannot rely upon the statement of one nutrition expert as being substantial evidence upon which to base claims.

### Federal Funds for Cortisone and ACTH

AS A result of the omnibus appropriations bill for 1951, $3,600,000 is now available for research on cortisone and ACTH, Federal Security Administrator Oscar R. Ewing announced last month. The entire amount is allocated for research grants to non-federal institutions and scientists. Mr. Ewing explains that the research will be directed toward evaluating preliminary results already achieved with these drugs and toward further investigation of the possible dangers and benefits of these compounds.

Dr. Leonard A. Scheele, Surgeon General of the U. S. Public Health Service, reveals that the grants will be made largely for study of the compounds in relation to arthritis and cancer, mental and neurological, metabolic and cardiovascular diseases, as well as for basic laboratory studies on the general biological effects of the compounds. Research projects on these diseases, with which there is the greatest chance for developing practical treatment procedures, or from which important fundamental information may be obtained, will be collected for special emphasis. Rheumatic fever, for example, said Dr. Scheele, may respond to a short course of treatment; therefore, in the public interest special attention will be paid to this area of investigation in hopes of getting an early "yes" or "no" answer.

In other diseases, Dr. Scheele added, such as rheumatoid arthritis, where preliminary data points to the necessity of prolonged administration, research will be pressed on careful investigation of long-term effects as a basis for safe treatment. Research also should stress the effects of ACTH and cortisone on such allergic diseases as severe asthma, and on diseases of obscure causation where hypersensitivity may play an important role.

Grants for research with cortisone and ACTH will follow the lines of other Public Health Service grant programs, and will be awarded only to qualified investigators in laboratory and clinical fields the proposals of which are well conceived and well developed. In the clinical field, preference will be given to those studies which may result in fundamental information on the biological effects of cortisone and ACTH and their mode of action. The application deadline is November 1.

### The Judge Tells Him

IN SENTENCING a man to a ten month sentence in a Federal work camp in an FDA action against a worthless hemorrhoid treatment, a Federal Judge recently remarked: "I think you're a very smart operator. You're not an expert or a medical man. You have no more business treating people for disease than I have."

BLACK STAR

# THE STORY OF G-11

## *(Hexachlorophene)*

AN AUTHORITATIVE STATEMENT PREPARED
BY THE STAFF OF SINDAR CORPORATION†

IT IS A matter of historical record that the chemical that has come to be known as G-11,* or hexachlorophene, and also known under a variety of trademarks and chemical names, has received broad acclaim in scientific circles, and wide application in industry. Seldom has there been such enthusiasm without a dissenting voice; seldom has such a material displayed its superiority for specific purposes above and beyond all competition. It is fitting, then, at this moment, to review the development of G-11, outline its achievements, in the hope of aiding research in its further application, discovering new potentialities and suggesting pathways for future studies. In short, it is our purpose, in relating this story, to disseminate knowledge regarding an important new product that has been placed at the disposal of the soap, cosmetic, and pharmaceutical industries.

For those of our readers not fully acquainted with G-11, let us at the outset state that hexachlorophene (a generic name for G-11 approved by the Council

on Pharmacy and Chemistry of the American Medical Association, and which we shall use hereafter in this discussion) is one of a group of chlorinated bis-phenols, developed by Givaudan-Delawanna, Inc., and now being sold by its associate company, Sindar Corporation. Hexachlorophene is known chemically, depending on the system of nomenclature in use, as 2,2′-methylene-bis (3, 4, 6-trichlorophenol); bis (3, 5, 6-trichloro-2-hydroxyphenyl) methane; or 2, 2′-dihydroxy-3, 5, 6, 3′, 5′, 6′-hexachlorodiphenylmethane.

Hexachlorophene is the bactericidally active ingredient in a large number of soaps used for medical, surgical and deodorant purposes, preoperative sterilizing solutions for surgical use, shaving creams, baby products and other preparations.

Previous to the development of hexachlorophene, it was recognized by many that a gap existed in the group of bactericidal and antiseptic materials available for external use. A number of specific chemotherapeutic materials had been developed for internal use which were powerful in either killing or preventing the normal growth and reproduction of disease-causing germs; the history of such products is generally traced to Ehrlich and his anti-syphilitic arsenicals, but chemotherapeutic agents generally did not become indispensable in modern medicine until the discovery of the bacteria-killing power of the sulfonamides and antibiotics.

The development of bactericides for external applications was not keeping pace with this work. The known materials were frequently ill-smelling, toxic, rather irritating and even dangerous to the skin, but above all lost the greater part of their antiseptic power when incorporated in soap or other alkaline media, thus making impossible the use of such products as part of the daily cleansing habits of the people.

Germicidal and so-called "medicated" soaps thus remained small specialty items for use for particular purposes, where irritation and toxicity could be carefully controlled. At the same time, no really clear understanding of the action of ordinary soap and the behavior of bacteria on the skin existed in the mind of the layman, nor even of the scientist. Many felt that a careful washing with soap would render the hands free from germs; actually, many germs, together with dirt, were emulsified in the lather, and subsequently rinsed off by water, but others remained unperturbed on the body. In some scientific circles, a theory held sway that the natural secretions of the body through the skin contained antiseptics that protected the body against the usual infections. Only recently has such a point-of-view been challenged.[1]

Givaudan-Delawanna, as a supplier of aromatic materials to the cosmetic, perfume, and soap industries, had long been interested in antiseptic products. It had studied with great interest the antiseptic properties of essential oils, and was a manufacturer of thymol and carvacrol, whose bactericidal properties were well-known. While these products have found wide application, they are unsuited for use as antiseptics in soap, as, like most of the phenols, they lose their bactericidal power therein. No material was available which met the rigid requirements necessary for a general antiseptic for external use in soap and cosmetics.

Under the leadership and guidance of Eric C. Kunz, Givaudan's president and co-inventor in several of the patents which were later to appear on hexachlorophene and related materials, research in this field was started. The laboratory, headed by William S. Gump, who brought to this work not only the imaginative mind of a chemist but an erudition in bacteriology and pharmacology, and directed by Max Luthy, plant manager and likewise co-inventor in several of the patents that were to issue, proceeded to undertake the investigation. Gump's progress was aided by a tireless collaborator, Arthur R. Cade, bacteriologist, who during this work developed new concepts of the meaning of bactericidal and antiseptic potency, and improved methods for its evaluation.

In the course of his work, Gump synthesized, among many other substances, a group of halogenated diphenylmethanes, formed by a controlled phenol-formaldehyde condensation, not entirely dissimilar to that used by Leo H. Baekeland in his early work on plastics. By keeping the temperature at a low level, resin-forming polymerization was prevented, and the condensation limited to the formation of two-ring compounds. The use of various halogenated phenols, containing from one to four chlorine or bromine atoms in the ring, made possible the development of a considerable number of analogs in this series, in addition to other compounds not as directly related from a structural point of view. It may be mentioned at this point that some, but not all, of these materials were new chemicals; a few had been synthesized many years earlier, mentioned in the patent literature, and dropped by the wayside.

Two of the materials were destined to have commercial success; a number of others show possibilities and may prove successful for special purposes in time to come. The materials became known as the G series, were numbered consecutively, and in the course of tests it was shown that the most promising seemed to be G-4* (dichlorophene) and G-11 (hexachlorophene).

A word on dichlorophene, and then back to hexachlorophene. Dichlorophene, although antiseptic in action, showed greatest promise as a fungicide. Used in athlete's foot powder or solution, in ointments for the treatment of bovine ringworm, and for tinea infections in humans, it was efficient, easy to apply, non-irritating, and inexpensive. In paper mills, it found wide usage as a slimicide; and during the war,

(*Continued on page 565*)

†Associated with Givaudan-Delawanna, Inc.
*Trade-mark of Sindar Corporation.
1 See A. Hellat: "Studies on the Self-Disinfecting Power of the Skin," Helsinki, 1948, p. 90: "On the whole, the results of the present investigation suggest that the skin itself exerts no significant disinfecting action upon microorganisms, and consequently the various concepts on the specific mechanism of self-disinfection of the skin seem to lose a great deal of their interest.
"As the presence upon skin of any substance with a considerable disinfecting action upon the test organisms could not be demonstrated, it seems reasonable to assume that the mortality of microbes upon the skin is chiefly due to unspecific exogenous factors."

# THE ANTIBIOTICS MARKET

*By Thomas J. Winn**

ONLY nine years ago the first patient was treated with penicillin in England—and he died because there wasn't enough of this new life-saving substance adequately to treat him. And today every hospital and corner drug store in America has complete stocks of penicillin, streptomycin and more recently the wide-range antibiotics—Aureomycin, Chloromycetin, and Terramycin.

Since penicillin came into general use, whole new groups of fatal diseases can now be effectively controlled. It is estimated that antibiotics can be used with fair to excellent therapeutic results in 30 to 50 per cent of illnesses requiring the attention of the physician—there are still many diseases presently uncontrollable and it is against these that the scientists and clinicians are devoting much time, with the hope of developing still newer antibiotics—antibiotics that may more efficiently combat tuberculosis, polio and cancer, for example.

Penicillin, first administered in 1941, streptomycin in 1944, Chloromycetin in 1947, Aureomycin in 1948 and Terramycin in 1950, each having peculiarities and advantages, give promise that tomorrow's new antibiotic will be a better one.

This is all very nice—you may say—it is interesting—historically—and probably every recent pharmacist graduate knows such history stories backwards and frontwards—but what about antibiotics and today's retail pharmacy?

All of us can easily visualize the bigness of the so-called oral hygiene products' market—the tooth pastes, tooth powders, liquid dentifrices, tooth brushes, mouth washes and gargles, false teeth adhesives, false teeth cleansers, and dental floss, without which we cannot even imagine a drug store—add all of the 1949 drug store sales—add all of these products together and you have slightly less than half the estimated normal 1950 market for antibiotics, and antibiotics are dispensed only on prescription! Add together *all* the vitamin sales to all outlets (except hospitals) and its not anywhere near as much as the 1950 sales of antibiotics will be.

Add together all sales of hormones, botanicals and sulfa drugs—antibiotic sales are larger! And it's extremely interesting to note that sulfa sales increased every year from 1936 to 1949.

Antibiotics, it is estimated by our company's market research people, will account for nearly $1.00 out of every $4.00 spent for prescription drugs this year! With this tremendously large market—growing as it does, month by month, there is little wonder that retail pharmacists are becoming more interested in antibiotics.

Most people know from the first-hand experience of a family member or dear friend how very serious pneumonia can be. In the season of 1935-36—a period reasonably typical with the 1949-50 season, we note that there were 1.5 cases of pneumonia per 1,000 cases—and—31.7 per cent of these were hospitalized. The average patient required 19.1 days of hospitalization. If we used an arbitrary figure of $15 per day—and we believe that to be conservative—you could readily calculate the cost per patient—add to this the cost of follow-up home nursing care, physicians' fees, losses in wages, etc., and the total amount is indeed imposing—the cost of getting sick—even in 1935-36 was high indeed. Now we won't quote a long series of figures to prove that it's cheaper to catch pneumonia today—but—we do believe you can recognize that the prompt and more effective treatment of many types of pneumonia today with Terramycin, for example, is in itself progress—aside from the actual dollars saved. The newer wide-range antibiotics—such as Terramycin, Aureomycin and Chloromycetin are now curing diseases in a fraction of the time it formerly took with anti-toxins, then sulfas and then penicillin.

It has been estimated, according to a survey made by Modern Medicine, that in the United States, nearly 130,000,000 illnesses during 1950 will be attended by a physician. Above we referred to the fact that from 30 to 50 per cent of the cases attended by a doctor could be treated effectively with antibiotics and of those 130,000,000 illnesses that will be treated during 1950 by a physician, only about one-fifth will be cared for in a hospital. The remainder will be seen in physicians' offices, in the patient's home, or elsewhere.

* Chas. Pfizer & Co., Brooklyn, N. Y.

In the treatment of those 130,000,000 patients, there are some developments worth noting. Retail pharmacies, already the principal element in the distribution of penicillin, for example, increased their lead from approximately 54 per cent in 1949 to an estimated 60 per cent of the total domestic consumption. Hospitals, however, dropped in the amount of penicillin they handle from 20 to 15 per cent of the market. They apparently are becoming a constantly decreasing factor in the distribution of certain antibiotics.

This represents a significant change in the distribution pattern of penicillin, for example, even over 1949 and very much different than the pattern set in 1948 and the years preceeding that, back to the original introduction of penicillin, which was made available exclusively through a limited number of specified hospitals. In the case of streptomycin, it is estimated that in 1950, the retail drug stores of the United States will account for about 41 per cent of the streptomycin and dihydrostreptomycin domestic sales whereas hospitals of the United States will account for somewhere near 28 per cent. Nineteen fifty again denoted a significant rise in the distribution of streptomycin through retail retail pharmacies and a drop in the percentage distribution of streptomycin through hospitals. Physician supply and surgical dealers represent an important secondary factor in the distribution of streptomycin. You remember that just a few minutes ago, I mentioned that over 85,000,000 cases would be treated by physicians during 1950 in the homes, in their offices, and elsewhere besides the hospital. Our surveys show that during 1950, physicians will obtain their *office* and *home* requirements of penicillin, streptomycin, and wide range antibiotics in somewhat the following pattern. From the local druggist, he will obtain over 65 per cent of his penicillin requirements and of streptomycin over 57 per cent of his requirements. In the case of wide range antibiotics about 90 per cent will be supplied by the local druggist to the physician for his office and home call use. In each case the percentage of supply by the retail pharmacy to the physician is on the increase.

Here are some additional facts which focus attention upon the important part played by retail pharmacies in the distribution, sale and use of antibiotics. If we were to ask the composite average American physician about what percentage of penicillin, streptomycin and other antibiotics he prescribes, are actually administered in hospitals, office, home, clinic, etc., the typical physician in 1950 would answer in this way—"Insofar as penicillin is concerned only about 25 per cent of the drug that I prescribe is administered in the hospital. The balance, 75 per cent, is prescribed to be administered in the office, home, or elsewhere. So far as streptomycin is concerned, about 72 per cent of the streptomycin prescribed is actually administered in hospitals with only something like 27 per cent prescribed, being actually used in the office or the home. So far as the wide-range antibiotics are concerned, it would seem that from 70 to 73 per cent of these drugs prescribed are actually prescribed for home use by patients." So that even with the very newest of the wide-range antibiotics, the largest use is seen in the home and in the office, which means sales through prescription departments of retail pharmacies!

The increase in physician usage of penicillin—and he

*(Continued on page 561)*

# DO PERFUME ADVERTISERS

WHY has so much beautiful perfume advertising gone largely to waste? Why do women simply admire a stunning 4-color job, then turn the page without giving a thought to its meaning for them? Why do too few American women use perfume regularly? Why do the gifts of perfume which they receive sit idling on a dressing table, serving mostly as a decorative display? Why, in spite of the multiplicity of perfume ads and their costliness, don't women respond more enthusiastically? Could it be that perfume advertisers are overlooking some subtle point, that they are assigning the wrong purchase motive to their audience, that they are talking to some imaginary woman who exists only in the art director's and copy chief's minds?

Before we say what should be done, perhaps we should analyze what has been done. The typical perfume ad of the past (and still all too evident in the present) has been based on one of three appeals, or maybe on all three combined; namely, *sex appeal*, *snob appeal*, and *luxury appeal*. These are unquestionably strong advertising themes as witness the many ads we see every day that make successful use of them. With all due respect to everyone concerned in the styling of perfume advertising, these three appeals seem on the casual surface to have a logical application to perfume. But the well-grounded suspicion has arisen that they don't speak loudly enough or convincingly enough. They simply don't incite enough purchases. Results are not commensurate. And that is also not to say that certain individual advertisers have not met with a commendable degree of success by exploiting one or more of these themes. Exceptions come readily to mind.

Exceptions, however, are still exceptions. The fact remains that the perfume industry, as a whole, has failed to get its money's worth out of advertising. A turning in the road is already apparent, but not all advertisers have made up their minds whether to take it or whether it is better to follow their accustomed course. Some are still keeping to the main road but taking a few curves and detours by way of experiment.

First and most lengthily, let's examine the overworked sex appeal angle to understand better wherein it has failed to produce a desirable volume of sales. An ad based on sex appeal gives the reader the false impression that perfume can be expected to stir up a storm of passion, that it brings men worshipfully to their knees, that it conditions the male sex to love and ardor, romance and marriage. Such far-fetched ideas have been mostly devised by men who think they know what women have in mind when they tilt a perfume bottle to a 60 degree angle. But we never knew any of these highly imaginative men to confess to having been as susceptible as they portray their co-sex. Words and pictures are one thing. Reality is another.

This does not mean that perfumes don't connect up with romance. So does a dimple in the chin, a teasing smile, a quick wit, a sympathetic understanding. Fragrance is a very charming something for a woman to possess. Without it, a woman is like a nightingale without song or a sky without clouds. Similarly, perfume is a most appealing accompaniment to romance, but it certainly doesn't make romance mandatory.

Either a woman has been sensible enough to put no stock in extravagant implications of the perfume ads, or she has been gullible enough to do so and has found disappointment rather than fulfillment. Mostly the former, we're inclined to think. It's men rather than women who have been the most influenced by sex-inspired perfume copy and illustration. Whenever the subject of perfume comes up in social conversation, notice how the men react and how they usually make either some naive or snide remark about women wearing perfume to lure a man. After all, men can read too, and perfume advertising has served to put them on the defensive against women who use perfume. They literally "smell" a trap and become wary. So, unfortunately, that kind of perfume advertising psychology is working in reverse.

If, however, the romance angle were given its just proportion in perfume advertising, the average woman might well be attracted and motivated by its message and men might not be so frightened. If a woman were told that it is femininity that men value in women and that perfume is nth degree feminine, this would constitute both a reasonable and appealing approach. Then, a woman would wear perfume when she is with a man whose attentions she desires—not as a weapon nor even a web, but as a beguiling accent to her femininity. And a man might not be so on his guard that he is

# S UNDERSTAND WOMEN?

*By Jill Jessee*

too intimidated to express his appreciation of her fragrance. With some encouragement, a woman would go still further and not only always wear perfume for his pleasure, but she would vary her perfumes from time to time and note the effect of each.

But if perfume murmurs of romance instead of shouting of sex, that still doesn't mean that perfume has served its entire purpose thereby. Perfume is a highly pleasing excitation shared equally by men and women, by the one who wears it as much as by the one or ones for whom it is worn. There is the crux of the whole thing! There is the one most important thing that perfume advertisers have largely overlooked. What about the woman herself?

A woman is excited about her new hat, she has a feeling for a certain shade of nail polish, she thinks her new umbrella is dashing and chic. Nor is all this due to the admiration she expects to receive from the opposite sex. So, why shouldn't she admire and enjoy her own perfume? She doesn't have a perpetual rendezvous with some man. Many of her social hours are spent exclusively with women, sometimes she is anonymous in a crowd—when shopping or travelling for instance, and often she is quite alone. Are these times in which to leave her perfume stoppered up? No, of course not. Perfume is as much for herself as for others—only much more so! It is a narcissistic delight. It is her very own pleasure.

Perfume advertisers, then, should think in terms of the woman who wears or should wear perfume—not of one phase of her life only, but of her whole life. In spite of all of the interesting studies that have been made and the data that has been accumulated, both scientific and unscientific, on the subject of perfume and love, we have yet to find the man who fell in love with the perfume instead of the girl. Perfume advertisers need to re-orient themselves.

Snobbery and luxury can be more quickly disposed of. A woman has every right to feel as proud of her perfume label as she does of any other label. Even though we know this to be false pride, it is a part of our American mores. The French woman, who is a much more ardent and discriminating user of perfume, has more individuality in this respect and choses her perfume by her own nose instead of by the tag it bears. In the course of time, it is to be hoped that American women will grow up too, but until they are more educated in perfume, they will depend to a large extent on the name of the maker. To tell a woman how to choose and how to use perfumes is much more important however than to tell her how envious her friends will be when they discover that she uses the same fashionable perfume as the social elect.

It is our feeling that the snob appeal has been overplayed, that like the sex appeal angle, it doesn't get to the heart of the matter. Just as some people go to the opera to impress others, some women may wear a certain perfume for its social significance. But most people go to the opera because they love good music, and most women wear perfume because they love its beauty and the sense of well-being and the emotional lift they get from it and not because they are snobs.

And, luxury! There's a mis-motive if we ever recognized one. So, by trying to put perfume out of a woman's financial reach, an advertiser expects to sell her. No wonder so many women shy away from the perfume counter and flip over the perfume pages of their magazines. Recognizing this mistake doesn't make it any easier to retract. It's going to be difficult to disabuse women's minds of the luxury bogey and to convince them that perfume is *not* a luxury. The few cents a day that perfume costs (which is what the amortization of the original investment amounts to), scarcely puts a strain on most budgets. But it's going to be a hard pull to persuade women that they can afford what advertisers have been telling them was reserved for those with a fashionable address and an impressive bank account.

Salesgirls, as well as customers, have to be re-educated. After all, selling is but the long arm of advertising, and the salesperson reiterates the advertiser's own ideas. She can make "personal" what the advertiser can only make "general." Both must work from the same premise. Once advertising and selling create the need for perfume as one of the valued pleasures of life, as a delight to be measured in terms of music or color or shape or texture, then women will respond and the sales register will show animation.

# PRESCRIPTION RENEWALS

SEEKING to resolve the situation existing in which the Food and Drug Administration expresses objection to prescription renewals, but issues no order which can be fought in the courts, the American Pharmaceutical Association is attempting to force the issue so that druggists will know whether or not their actions are legal. The Association has issued a statement telling why they have engaged legal counsel in the matter, and they have also released for publication the letter which their attorneys have sent to the Federal Security Administrator. The statement of the Association reads:

"For some time the practicing pharmacists of the United States have labored under the handicap of carrying on their prescription practice without a formal regulation on the extent to which refilling of prescriptions is regulated by the Federal Food, Drug and Cosmetic Act. The public expressions and interpretations of the Commissioner of Food and Drugs and his staff on this subject have been at variance with the interpretations of the sections of the Act concerning prescription refilling as conceived by the officers and Council of the American Pharmaceutical Association.

"Sincere efforts have been made by the Association to resolve the differences in interpretation of the Act, but in our judgment the Food and Drug Administration has been vague and arbitrary in its interpretations of what the Association contends to be the clearly expressed intent of Congress in this matter.

"It was hoped that the F.D.A. might bring action against a reliable pharmacist who undertook to renew a prescription, the renewal of which was not otherwise prohibited by law, in order to test out the validity of its interpretation that no prescription may be renewed, but it seems clear that the Administration has no intention of risking a defeat in the courts on this issue. In every case brought to our attention where pharmacists have been threatened with legal action for the renewal of a prescription, not otherwise prohibited by law, they have also been guilty of over-the-counter sales of drugs labeled by manufacturers with the legend "not to be sold without the prescription of a physician, dentist or veterinarian," or an equivalent statement, so the prescription renewal ruling has never been tried on its merits.

"Sufficient time has elapsed for the Administration to bring such action if it was convinced that it had the right to prevent all prescription refilling under the Act.

"The American Pharmaceutical Association, believing that the Administration is exceeding its authority, engaged highly competent legal counsel to review the provisions of the Act, and has been informed by its legal advisors that its position on the question at issue is sound and clearly supported by the plain language of the law.

"Accordingly, it has authorized counsel to proceed with the necessary legal steps to compel the issuance of a clear-cut ruling on the subject, which, if found unacceptable to the Association and to the practicing pharmacists of the United States, can be made the subject of further action in the courts to establish without any doubt what, if any, authority the Federal Food, Drug and Cosmetic Act confers upon the F.D.A., with respect to the professional prerogatives of pharmacists in the matter of prescription refilling.

"On August 31 the firm of Arnold, Fortas and Porter, through Mr. Thurman Arnold, former Assistant Attorney-General of the United States and Judge of the U. S. Court of Appeals for the District of Columbia, sent the attached communication to the Federal Security Administrator which is self-explanatory.

"The American Pharmaceutical Association regrets the necessity for legal action in a matter of this kind and wishes to make it plain that it will continue to cooperate to the fullest extent with the F.D.A. as it has in the past in its endeavor to stamp out indiscriminate sales of potent drugs without physicians' prescriptions, but it cannot condone the apparent policy of the Administration to interfere with the professional prerogatives of pharmacists and physicians, or to encourage prescription products to be converted into products to be sold over the counter without prescriptions.

"The A.Ph.A. also wishes to make it clear that its endeavor to obtain a clarification of the present law with respect to the refilling of prescriptions has nothing to do with proposed legislation to amend the Act. The proposed amendments, in the opinion of the Association, attempt to clarify the matter by removing the language of the law under which the Association believes refilling of prescriptions to be authorized. Obviously, this would take from the public, the pharmacist and the physician the very privilege which the Congress was careful to preserve in the first instance.

"The Association will obviously take no stand on the proposed legislation until the fundamental issue raised in the communication to the Federal Security Administrator has been settled.

"The Pharmacists of the United States will understand that the issue of their right and duty to exercise professional judgment as contemplated under State laws which grant them their license to practice pharmacy transcends any other issue here involved as far as the profession is concerned. It is for this reason that the A.Ph.A., mindful of the great importance of maintaining the professional status of pharmacy, has initiated this action and will see it through to the Supreme Court, if necessary."

This statement was issued over the name of the Association Secretary Robert P. Fischelis, and appended thereto was the statement: "Issued with the approval of the Committee on Legislation of the American Pharmaceutical Association: H. H. Schaefer, Brooklyn, Chairman; P. H. Costello, Chicago; R. C. Gasen, Syracuse, N. Y.: L. M. Kanter, Baltimore; R. L. Swain, New York."

The letter to Federal Security Administrator Oscar R. Ewing, signed by Thurman Arnold and Walton Hamilton, reads:

"We, the undersigned, as attorneys for the American Pharmaceutical Association, respectfully ask for a formal hearing—and a resulting directive or regulation—in respect to the whole matter of the condition upon which physicians' prescriptions may and may not be refilled. This request is made in the name of the Association, of its 13,000 active and 10,000 associate members, and of the public whose health it is the very purpose of the Food, Drug and Cosmetic Act to safeguard; and we feel sure that, after reading the reasons which prompt this demand—as set forth in the paragraphs below—you will agree that such a hearing is imperative. It should be held at the earliest date consistent with due notice and the kind of preparation essential to a probing inquiry. The best time seems to be sometime between the 1st and the 15th of October. *(Continued on page 552)*

# PRIVATE LABEL COSMETICS

EWING GALLOWAY

THE private label manufacturer is today an integral part of the cosmetic industry for the simple reason that it is capable of performing most efficiently certain functions pertinent to the industry. Economic justification is the prime reason for the firmly established position of the private label cosmetic manufacturer. The ability of the private label producer to serve certain segments of the industry more efficiently than manufacturers of related items can serve themselves, particularly with certain products, is a basic reason for the sound position of these firms. Cosmetic companies, both large and small, find it most advantageous to have some of their products—and in certain instances, all of their products—made by private label manufacturers so they can concentrate completely on the tremendous job of selling.

Just as merchandising is a job of experts today, so the manufacture of cosmetics requires the attention of many highly skilled specialists and technicians qualified to conduct better and more complete research, to set up and control efficient volume production, and overcome such constantly occurring production problems as messiness. Herewith an effort will be made to appraise some of the major difficulties and some of the merits of the self manufacturer which should enable the reader to draw his own conclusions as to which method is most advantageous in his particular operations.

It is well known to manufacturers that the messiness encountered in the manufacture of lipsticks, rouge, and similar products occurs as the result of the colors used in these products, even in controlled rooms, getting into creams and other cosmetic items. Even double doors or location on different floors of a building cannot entirely prevent colors, which are as fine as five microns, from being blown or tracked to a cream room or other section of the building. If made in a separate building, there should be no trouble, providing the plant is far enough away. However, then some possible benefits of efficient manufacturing operations will be lost.

Assuming that messiness can be controlled, let's analyze the possible advantages and disadvantages to a cosmetic manufacturer selling up to five or even ten million lipsticks a year. Let's assume this manu-

*Kolmar Laboratories, Milwaukee 2, Wis.

*By Lessing L. Kole*

facturer can produce them in a separate building or can otherwise control the colors in a fairly satisfactory manner. By making their own, they feel they can reduce the cost, absorb some of their manufacturing overhead, or get exclusivity of formula. Categorically, the cost of color proofing and even air conditioning a room must be considered. Unless a separate building is close to the main plant, it would require its own receiving, shipping, and other overhead items and defeat one valid reason for self manufacture. Because of messiness, even if hoods are used, there is some loss of costly colors.

In lipstick manufacture, for instance, a rough grinding room is desirable, although not essential. Then, a fine grinding room where molding is done, is required. Finally a lint-free or air conditioned assembly room—making a total of three enclosures to insure a high grade final product. Each of these rooms should have one skilled worker and additional people capable of jumping into the breach as illnesses and vacations occur, or if an employee leaves. In the fine grinding division, very experienced technical people are necessary, and the same holds true for molding. The assembly appears academic, but it is just the opposite.

Probably the most costly and troublesome phase of lipstick manufacture is the unanticipated difficulty with lipstick containers, which in spite of the efforts of manufacturers, occasionally have many different defects. Some of the major ones which the private label manufacturer often absorbs or controls, are:

1. Too easy or tight swiveling, or comes out of track.
2. Sloppy mechanism resulting in filler touching sides or swiveling up unless equipped with locking device.
3. Carriers of different diameters or out of round resulting in fillers falling out or excess of lipstick mass messing assembly.
4. Polishing compounds, brass chips, oil, dust, or lint in mechanism.
5. Imperfect finish, scratches, and similar blemishes.
6. Tight, loose or egg shaped caps.

Is it better to aim at a possible lower cost of finished product or absorption of some overhead, or is it more advantageous to get:

1. A firm "complete" price resulting in a fixed cost.
2. A far greater likelihood of uniformity of shades and products.
3. Elimination of additional overhead and administrative costs and less capital investment.
4. Container problems coped with by experts.
5. Elimination of extra labor with its accompanying problems such as O. A. B., pensions, and the like.
6. Complete freedom from the possibility of messing a plant, elimination of investment in equipment, space, light, heat, power, insurance, depreciation, and absolescence.
7. Elimination of raw material inventory, bad batches, and normal shrinkage of materials.
8. Products in step with the market. Products run in cycles, not only in shade but in consistency. Private brand manufacturers are often the first to notice or establish these trends.
9. Adequate research, which is most necessary but costly. Spasmodic research is undesirable.

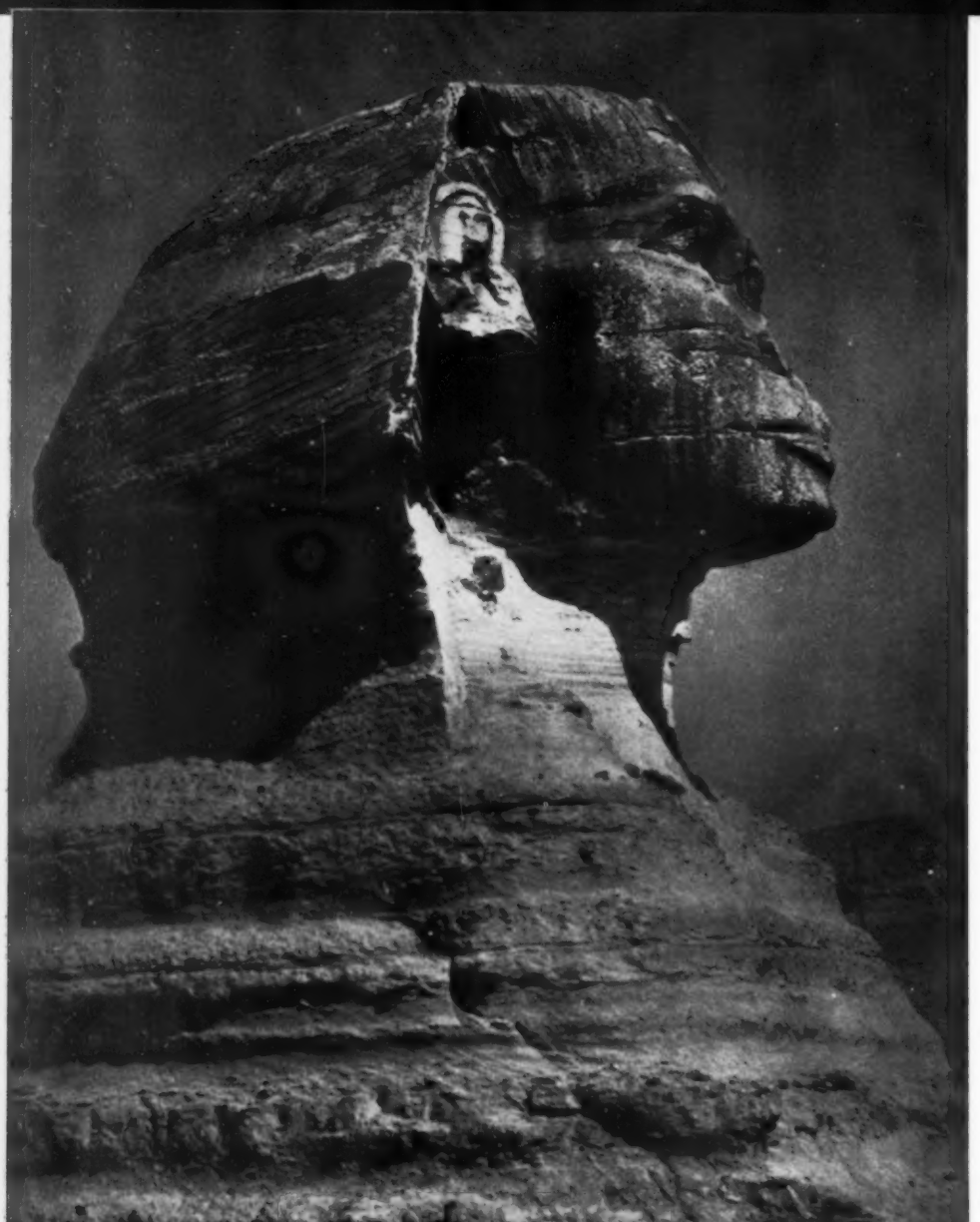
Only those who are familiar with the idiosyncrasies of each of the different colors from batch to batch as well as the oils and the waxes, know how to cope with them in rough and fine grinding and in molding. Remolding and discarding batches which increase material and labor costs will result if high standards are maintained.

Francis Chilson, in his recognized splendid articles, stated in the June 1948 issue of DRUG AND COSMETIC INDUSTRY:

"In factory operations a great variety of products makes it impossible to get long enough runs to push costs down to their lowest point. More operators are required and a lot of their time is lost in switching from job to job, even when operations are very carefully planned."

Let's weigh the costs and selling prices of a concern which makes its own compared to that of a private label manufacturer. A large private label manufacturer can put in larger quantities and demand, in some instances, special raw materials which meet his specifications. If a concern making its own products just calculates its prices on the prime cost of material and labor and does not add a sufficient overhead, it is imminently unfair. The manufacturer must add to the material the cost of bringing the product into their place—shrinkage—investment—storage and fire costs, and other items. A similar situation prevails on labor:

*(Continued on page 563)*



BETTMANN ARCHIVE

# KHELLIN

*By Milton A. Lesser*

THE story of khellin could be used to illustrate a number of points about modern research. For one thing, it offers another example of the continued importance of the botanical drugs in these days of synthetics. For another, it provides a further instance of those fortunate "accidents" that happen when trained observers are present. It also indicates the efficiency of modern scientific methods and the kind of progress that can result from world-wide cooperation. Most important, of course, is the fact that the story of khellin shows the development of a new weapon for the medical armamentarium.

Khellin is obtained from the fruit of a plant which grows wild in the Eastern Mediterranean countries. This plant, known in Arabic as "Khella," is called *Ammi visnaga* by the botanists. As noted by Anrep and his associates[1] at the University of Cairo, in Egypt, decoctions of the dried fruit of this plant have been used since ancient times by the people of the Middle East and are frequently prescribed by the local physicians as a diuretic and as an antispasmodic in cases of ureteral stones. In 1934, a decoction and tincture of *Ammi visnaga* were included in the Egyptian pharmacopoeia.

As reported by Anrep and his colleagues,[2] interest

in khellin was aroused as a result of an accidental observation of the drug's effect on a member of their laboratory staff. This man had been suffering from definite symptoms of coronary insufficiency; anginal attacks were frequent. In addition to this cardiac condition, this man was also a victim of severe renal colic, and X-rays showed three stones in the left ureter. He was advised to try a tincture of *Ammi visnaga*.

The drug seemed to be helpful because after a week he passed some sand and a stone (calculus). In addition, this man, who usually behaved like a semi-invalid, appeared stronger and more vigorous. He moved faster, lost his frightened look and could climb stairs without the usual attacks. Of course, he attributed his improved condition to the passage of the stone. This, however, was not the case because, in a few days, his condition was as bad as before. On the possibility that it was the cause of his temporary improvement, this laboratory worker was persuaded to resume taking the tincture of *Ammi visnaga*. The relief which followed was so unmistakable that he has continued to take the drug for over two years.

As a result of these observations, Anrep and his coworkers decided to investigate the action of *Ammi visnaga* on the cardiovascular system, with particular attention to the coronary blood flow and the heart muscle. In 1946, they[3] reported on the experiments which indicated that the drug was an effective vasodilator with a selective action on the coronary vessels. By 1947, a preparation containing the active principles —chiefly khellin—extracted from the plant was being used rather extensively in Egypt for the prophylaxis and treatment of angina pectoris, often with remarkable results.

Subsequently, some of this preparation was brought to the United States where it has since undergone exhaustive chemical and pharmacological study and clinical trials. In passing, it should be noted that, according to Wegria,[4] attempts to grow the plant in this country have not been successful as yet.

In tracing the more modern history of the drug, it was found that, in 1879, Mustapha[5] had extracted the print of *Ammi visnaga* with alcohol and ether and had obtained bitter-tasting, white, silky needles that were sparingly soluble in alcohol. He suggested the name khellin for this impure compound. In 1930, Fautl and Salem[6] isolated pure khellin. Later, in studies extending over several years, Spath and Gruber[7] isolated three pure crystalline substances from the seeds of the plant. These substances, which belong to a group of chromones, are khellin, khellol glucoside and visnagin.

Khellin and the glucoside are found in the dried seeds in equal amounts. However, it has been found that the glucoside is pharmacologically negative and is of no therapeutic interest.[2,8] With regard to visnagin, it is said to occur in the seed in such small quantities as to be of no special significance. It has a biological action similar to that of khellin but is about 30 per cent weaker. Since both are soluble in the same solvents, it is rather difficult to separate visnagin from khellin. The reverse is true with respect to the glucoside which, therefore, can easily be removed from the extracts.

It is obvious from these studies that khellin is the active principle of *Ammi visnaga*. The Council on Pharmacy and Chemistry of the American Medical Association[9] has proposed the generic name visammin for this compound which, chemically is designated as dimethoxy-methyl-furano-chromone. Anrep and his associates,[2] however, object to the term visammin, not only because khellin has been widely used in the German and English literature, but also because the new name might imply the presence of an amino group, which is not the case.

In 1930, after isolating pure khellin, Fantl and Salem[6] determined its composition and suggested a structural formula. Eight years later this was somewhat modified by Spath and Gruber.[7] Bringing things up to date in a recent report, Moore[10] stated that their proposed structure has now been completely vindicated by the synthesis of khellin in four different laboratories during the past year. These syntheses verify the structure of the compound as 2-methyl-5,8-dimethoxy-furanochromone. On the basis of extensive chemical and pharmacological work with khellin at the Smith, Kline and French Laboratories in Philadelphia, he is of the opinion that its commercial production by synthesis does not appear feasible in comparison with the isolation of the natural product from the seeds of *Ammi visnaga*. In passing, it may be noted that, according to Burgison and Hager,[11] compounds related to khellin are also being investigated.

Pure khellin occurs as colorless, odorless crystals. It is soluble in boiling water, chloroform, acetone and alcohol, moderately soluble in ether, and insoluble in cold water. It has been found[1,2] that khellin is rapidly absorbed from the small intestine, from the stomach and from the large intestine. Intramuscular injections of the drug are followed by a rapid increase of its concentration in the circulating blood, which gradually diminishes and finally becomes stabilized at an approximately uniform level. However, oval administration is not followed by such a temporary large increase. The concentration of khellin increases gradually and reaches a stable level in about 30 minutes.

Khellin is not excreted in the urine in an unchanged form and it disappears from the blood and tissues at a very slow rate. The concentration of the drug in the blood does not diminish more rapidly than in the tissues, thus indicating that the tissues serve to store the active principle. This also serves to explain the prolonged action of the drug. Because of this retention, khellin has a cumulative effect which must be considered indetermining dosage.

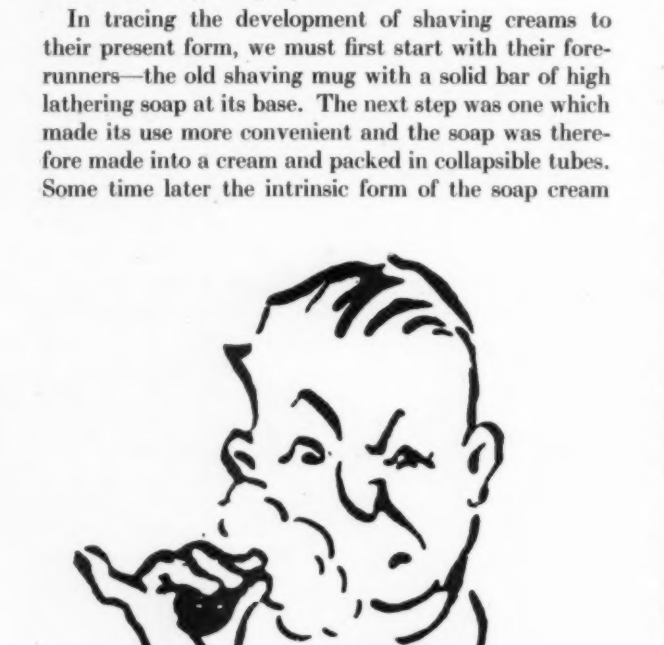
*(Continued on page 556)*

# SHAVING CREAMS

*By Harry Helfer*

SHAVING creams have been exhaustively treated in the literature and are the subjects of numerous patents which treat with ways and means of improving performance as well as rinsability after shaving has been completed. The market for such a product is still quite large and apparently growing. Interest therefore is still keen in the development of this classification of preparations.

In tracing the development of shaving creams to their present form, we must first start with their forerunners—the old shaving mug with a solid bar of high lathering soap at its base. The next step was one which made its use more convenient and the soap was therefore made into a cream and packed in collapsible tubes. Some time later the intrinsic form of the soap cream was changed to a vanishing cream base and also packaged in tubes. What may be a forerunner of a future trend is the adaptation of what is now the common barber shop dispenser of the lathered cream ready for immediate application by means of the incorporation of a propellant under high pressure in a bomb. There is at least one such product now being marketed for individual consumer use rather than professional use, which shows ready acceptance by the market.



The purpose of the shaving cream is to ease the shaving operation and to make it as painless as possible. It is true that the most necessary tool for shaving is a sharp edged blade, but the cream finds its place by measurably increasing the efficiency of the blade by "softening" the beard. The term "softening" covers a multitude of specific acts but the most important is the actual wetting of the beard with water. The most convenient method of accomplishing this is to first remove any superficial layers of water repellent materials adhering to the beard. This is the best accomplished by the introduction of a surface tension reducing agent, which would bring the soil into a suspension or emulsion and thus effect its removal from the beard. Soaps were the first of our surface active agents and therefore its universal use as such for a long period.

Since high lathering qualities in soaps have always been associated with high detergency values (actually this is not necessarily true) a greater concentration of coconut oil fatty acids were used in these soaps to better promote this function. The factors concerned with hardness of the soap and its ready miscibility with water were controlled by the addition of fatty acids soponified from oils containing appropriate quantities of stearic, palmitic and olive acids, and since a hard soap was originally desired, caustic soda was the most commonly used alkali.

The same basic principle governing the formulation of shaving soap was used in the lathering shaving creams. Other factors had to be incorporated however so that the cream could be packed and dispersed from collapsible tubes and still keep its effectiveness. The cream primarily had to be of a soft enough consistency physically to perform its function under the new conditions. Potassium soaps were therefore introduced into the

formulation as well as a fair percentage of glycerol. In addition, an appreciable amount of water was also added. The most common practice in manufacture was to saponify the oils directly with the caustic and then add the necessary ingredients in addition. A portion of the soaps would then crystallize on standing to produce a desirable pearly effect and cause the cream to soften somewhat. It is important to bear in mind that the shaving cream was applied to the face directly and then brushed to produce the lather on the face. This is a somewhat different procedure than the use of the soap where water was first added to the soap in the mug and then whipped up to a lather before application. Addition of a hard soap directly to the face and then brushing up a lather would be a difficult operation because of the slower miscibility of hard soaps with water as compared to soft soaps. The addition of glycerine which is an excellent solvent for soaps further aids this necessary miscibility.

More recently some manufacturers have dispensed with the saponification process, using the fatty acids as such in manufacture. This departure came about as a result of a recent trend towards the manufacture and sale of fatty acids as such. With improvement of distillation technique, it is now possible to procure fatty acids free of undesirable fractions in commercial quantities. By their use known irritating components of the oils formerly used may be eliminated from the formulations while the desirable substances can be used. A further advantage is in the greater care of manufacturing since relatively expensive installations for saponification of the oils are no longer necessary as the fatty acids and alkali are capable of reacting instantaneously and at low temperatures.

The brushless shaving creams which are newer members of the shaving cream classification, are now in as great or nearly as great use as are the lathering types. This product performs much the same function as the lathering type but depends upon an emulsion to remove the soil film so that the beard could be wetted. It contained, in addition to the soap, usually potassium stearate which was the emulsifier and wetting agent and an excess of stearic acid which gave the cream its body and relatively large amounts of a humectant which kept the face moist and prevented evaporation at too rapid a rate during the shaving operation. Many of the innovations introduced into shaving creams were developed with this product in mind. The innovations cover a broad area and will not be discussed comprehensively their discussion being generalized.

One of the features about a cream which would effect its sale is the ease with which it could be rinsed from the blade. To better enable easy rinsability to take place, synthetic detergents and wetting agents were incorporated in the cream. Sodium lauryl sulfate has found its way into some preparations as a result, as well as others. The alkanolamine condensates, for example, are being used for much the same purpose. Both these substances could easily be introduced since they are both stable against soaps and at alkaline pH ranges. In the case of sodium lauryl sulfate, it should be borne in mind that the potassium salt is a great deal less soluble in water than is the sodium salt. To prevent loss of activity, potassium ions should therefore be removed from the preparation. The addition of a wetting agent also would help attain the primary function of the cream, that is to moisten the beard. These agencies however cannot be introduced into a formulation without expecting some change to take place in its physical consistency and other changes would necessarily have to be made in order to bring it to its desired consistency. This can be arrived at only by proper experimental work beforehand.

Work has also been done to introduce substances which help to ease irritation due to too close shaving of the beard. Most men are inured to shaving with the regularly available materials, but there is a considerably large number whose skins are more easily irritated and are therefore seeking brands which advertise soothing additions to minimize the resultant irritations. Many different types of substances have been tried as a means to satisfy this market, but there is not too great an amount of information available as to their actual efficacy. Possibly the best known of these is menthol which has a decided cooling effect on the face and therefore does not allow the pain due to irritation to come through as vividly as it otherwise would. Claims

*(Continued on page 562)*

# N.W.D.A. MEETING

T. A. LAMBERT, PRESIDENT

"DESPITE hesistancy in the spring, business volume during the last twelve months has continued at high levels. The dollar volume of wholesale and retail sales has increased nearly two and one-half times since before the war," said retiring President Robert Morrison at the Annual Meeting of the National Wholesale Druggists Association, who continued, "wholesale and retail drug volume increased somewhat less than would appear from the figures since drug industry prices rose much less than those of most other items, probably around 15 per cent. Fair traded drug store product prices hardly rose at all, only 3 per cent up to 1948, very little since, and are remaining very stable against present inflationary pressures. Fair trade may properly claim credit for working in the interest of the consumer against price inflation.

"In fact, I might add that there are several wholesalers, very astute ones, who are inclined to feel that some of the proprietary medicine manufacturers have been a little less than fair to themselves and their servants whom they are paying in fifty-two-cent dollars, instead of one-hundred-cent dollars. My own personal feeling, however, is that unless a major effort is made by every segment of industry to keep all prices down as far as possible, we are inviting the kind of run-away inflation that has spelled the end of a great many countries.

"The population of our country increased 10 million in the forties. It is estimated that it will increase 13 million more in the fifties. The babies of the forties will be school children buying more of your goods in the fifties.

"Add the amazing progress made by the research workers in this industry in developing new products for the relief of human suffering and the cure of human ills, particularly in the antibiotic field, and with ever higher wages and increasing employment it seems safe to predict that the sales of drug industry products may well double again in the next ten years.

"Our national productivity will have to increase materially just to maintain our present high standards of living for this larger population.

"Estimated population increases are largest in two age groups: those over 60, a 25 per cent increase; those under 20, a 10 per cent increase. In the working group from 20 to 60, the increase is estimated at only 5 per cent, with an actual decline in the 20 to 30 age group.

"A negligible increase in the working population, coupled with a large increase in population in the consuming groups means just one thing—a spectacular increase in individual productivity must be achieved if enough goods are to be produced and distributed to maintain our present standards of living.

"Productivity is the sum of manpower, skills and machinery.

"Manpower is limited and its cost high. Wages have increased spectacularly and every day's newspaper tells of higher labor demands, invited at the moment by stand-by controls.

"Skills are acquired by long experience or more rapidly by good training. Wholesalers too often, until recently, have left their employees to learn for themselves. Machinery can decrease the need for skills; good training can reduce the time necessary to acquire those that are essential.

"In the past ten years, machinery—modern plants, better laid out and with better equipment—has made

possible the unprecedented production for war and peace, by enabling the same hands to produce more goods. There are some outstanding examples of this among our manufacturing members. A number of wholesale druggists have built now, modern plants that are the envy of those of us still inadequately equipped. The rest of us must modernize also to enable our manpower to produce more.

"Machinery, for example, is not only eliminating hours of unnecessary walking by order pickers by listing the items in shelf order, but in one house this machinery is used to make it possible for pickers to fill all items by number. No longer do these order pickers waste time guessing what formulation, shade or style the customer wants, no longer do they need months or years of experience. For the order pickers one number is as easy to find and fill as another. Here is an outstanding example of one use of machinery to enable the same amount of manpower to do more work with less skills.

"Your Association has for a number of years been advocating plant modernization studies to improve efficiency.

"Through research work over the years it has developed accurate wholesale drug handling costs, accurate information or the coverage of the retail drug trade by wholesalers, the Davis study on wholesale salesmen, Fisher's study on warehouse operations, job descriptions and classification, to mention but a few. Such research should be continued. As possible subjects for special study I suggest:

"a. More effective utilization of wholesale salesmen. (The Davis report showed wide variation and an opportunity for great improvement in the average level.)

"b. A study of the most modern warehouse operations. (The Fisher study showed typical or average results. We should study the best, compare our results with them and see the goal towards which we must work.)

"c. Better buying. (One group of our wholesalers has already found that there is major opportunity for improvement here.)

"d. Trade promotion, for lack of a better name. (A study of retail drug problems to determine not only how to assist the retail druggist in operating more efficiently, getting a larger proportion of the consumer dollar, but in presenting that information to him so that he will recognize it as a sincere effort to assist him in his problems. Too often material presented to the retailer as a sales service has much of a selfish slant and is received by the retailer, quite naturally, as no more than another form of sales talk. The Wednesday session attempts to cover this subject in part. It could well serve as a starting point.)

"One other item that I would like to add at the risk of recounting a slightly personal experience is some work on public relations. It is very difficult for the individual wholesaler, even if he tries to develop thoroughly unselfish sales promotion plans, to present them to his customer without having the customer slightly suspicious.

"There is nothing new in any of these subjects. They probably sound trite to you. I read over my father's presidential report some thirty-two years ago and found most of them in it. As long as we stay in business, I think these problems are basic and will continue and will need our best attention at all times.

"There is no longer any question that the functions performed by the wholesaler must be performed by someone and paid for. The service wholesale druggist's ability to perform these functions most economically in the distribution of drug store products has been increasingly recognized by manufacturers as rising expenses have led more and more of them to study their own costs of filling small individual orders.

"Improvements in efficiency already made by our wholesalers make this true today, but the manufacturer can always sell direct if he decides it is more economical, and we wholesalers will maintain our present essential position only so long as we continue to furnish the necessary warehousing and distribution services most economically."

Executive Secretary E. Allen Newcomb reported that the Association is maintaining its numerical strength in membership with 233 Active Members, 479 Associate Members, and 22 Complimentary drug trade press Members. Again this year, with one mailing of bill for dues, over 95 per cent were paid up within sixty days. At the time of the meeting, less than 20 members —all Associate Members—had not paid their dues.

With regard to the problems confronting the entire drug industry today, Mr. Newcomb said:

"The time has passed when the manufacturer can be concerned only with what he considers to be his own little problems. The time has passed when the whole-

*(Continued on page 560)*

**Visible Quality in the Package Can Reflect the Invisible Quality of the Product!**

**Leading Manufacturers of Baby-Care Products, Recognizing That Fact, Give Preference to**

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**CLAY COATED**
REG. U.S. PAT. OFF.
**BOXBOARDS**

**FOR FINE FOLDING CARTONS**

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# PACKAGING AND SELLING

## PACKAGE TRENDS

Once upon a time packaging was in a very stabilized position. Up until about 25 years ago it was considered a very bold and courageous thing to do when a manufacturer made changes in a long established package. At this time there were some manufacturers who almost lost sight of the fact that it was their product that the consumer used and their product that the consumer returned to buy. Some of these men acted almost as if the package was their product and they had a fanatical belief that the slightest little imperceptible change would have vast repercussions on their business.

A few years later it became quite the style to make package changes, and the longer the package had been in existence the more necessary it seemed to completely modernize the package. Some of these changes appear rather amusing today because there were companies which took as long as a year or even two or three years to make these changes by imperceptible stages. At this time it was also quite the thing to introduce a new package with a tremendous flourish as if it were a new and wonderful product and to report sales increases of 20 per cent or 30 per cent or more with the introduction of the new package.

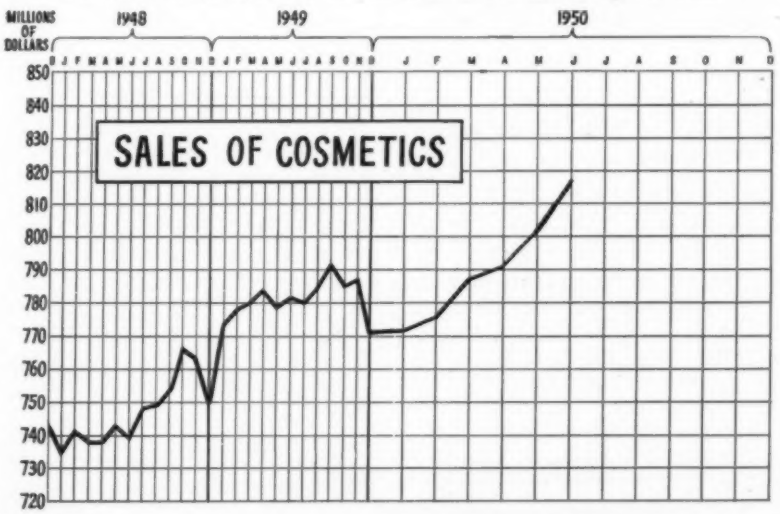
Within the last 15 years or so, packaging has become very dynamic and is influenced by many factors that were not even thought of 25 years ago. For instance, the requirements of the automatic packaging machine have had a vast influence on packaging, and the competitive struggle to invent new systems of customer convenience in the use of the package has had a profound effect not only on packaging but in some outstanding cases on the product itself. It is not uncommon in the cosmetic business for a new substantial business to be created in a relatively short space of time, exclusively or almost exclusively, because of a new package which substantially adds to consumer convenience.

There are other factors coming up which may in the future have a substantial effect upon packaging practices and the kind of packages that are used. That taxes can have a substantial effect on packaging is well illustrated by practices of English perfume and cosmetic manufacturers. In this country the 100 per cent sales tax, which is applied to both the product and the package, has led the majority of English manufacturers to reduce the cost of packaging to the bare minimum that will get by in order to keep the retail price within reach of the English consumer. There isn't the slightest doubt that this excessive retail tax has delayed or destroyed what could easily have been a substantially expanding packaging industry in that country.

The enormous growth of machine vending and the expansion of this type of retailing into continually new types of packaged products are bound to have a very substantial effect on the packaging of certain products. We understand, for instance, that Wrigley has already adapted its packaging to machine vending. If we realize that already 20 per cent of the cigarette sales in this country are made through vending machines and that a large and increasing percentage of five and ten cent candy is dispensed in this way, it is easy enough to conclude that this will be a growing factor in packaging.

The trend to self-service in retailing which is already underway in large volume for grocery products, many toiletries and similar staples and which has already vastly influenced the packaging of certain mass products will continue to exert an increasing influence. Thinking in general for the packaging of mass products of this kind for open display and self-service in places like the supermarket and in vending machines has been predominantly along the line that these products are primarily impulse sales items. Without subtracting anything from the very strong impulse factor in retail purchasing, there is a decided trend in merchandising thinking to put the impulse motive and influence in its proper place and to remember that many products in mass distribution, which are heavily advertised and which in character are necessities or utilities, are still predominantly purchased by direct anticipation as a need. Just how these two conflicting factors

Retail sales of cosmetics for the twelve months ended with June 1950 totalled $817,145,000. This compares with $801,611,000 for the twelve months ended with May 1950 and with $780,956,000 for the twelve months ended with June 1949.



in retailing will affect the future package is still very uncertain and still under very embryonic thinking.

It is true, however, that the absence of the retail clerk is bound to have an effect on packaging. Even where a store employee is available, it is becoming increasingly clear that the multiplicity of items with their multiplicity of uses make it literally impossible today for a store employee to be fully informed about the products he sells or to be able to answer intelligently the questions of a customer who is contemplating a purchase whether from impulse, or as the result of word-of-mouth recommendation, or through sheer necessity. As much as possible of this retail selling and the answering of specific questions regarding quality or usage by the customer must be taken over ty the package or an accessory to the package.

It is largely because of the package that many products in some industries have been able to expand into the gift market and compete successfully to the point where they have added a very satisfactory margin of business to their normal year-round direct sales. It is also true that many kinds of products which have always been included in a simple utility category, such as suspenders, garters, electric razors, etc., have in some cases been packaged rather extravagantly in an effort to build up in the minds of the retail purchaser a feeling of quality and prestige for the product. This large extra plus in packaging quality has meant quite a large extra plus to the cost of the commodity when the package has been marked up at the same ratio as the product to cover all sales and advertising expenses.

It has been the opinion of some people in certain directions this has been an extravagance which, while it produced extra sales and a glowing business record for a time, was leading into a situation where price would eventually affect consumption.

It is reported that at this very moment one of the largest perfume companies is about to launch a new campaign in which the theme will be why not buy your perfume the way it is purchased in France, that is, every cent you spend goes for the perfume and not for the package. The odors of this company are to be packaged in a very plain bottle which reports classify as "a medicine bottle." By means of this maneuver the perfume would be drastically reduced in price. Packaged and bottled in France these odors will sell at about half the price of any previous well-known imported perfume. It will be extremely interesting to watch the consumer reaction to this proposal.

The sale of perfume has drastically declined in the last three years, and there is a fixed opinion among certain people in the trade that this is not caused by an excessive retail inventory or an excessive home inventory or an over-saturated gift market, where perfume had nearly a monopoly, or a turning away from the use of perfume by the American consumer. These people believe that it has been simply and bluntly a question of economics and that the American woman has decided that perfume cost more than it is worth.

Packaging has a long historic record of demonstrating that it can enhance the value of the product in the public's mind in various subtle and intangible ways. Many ethical pharmaceutical manufacturers, whose products are sold only on prescription, have found that this psychological influence of the package on the mind of both the doctor and the patient has very potent influences.

Nevertheless, a package is basically functional, that is to contain and preserve the product, permanent convenient storage and convenient usage. For many products, when it goes too far beyond this point in raising the price which the consumer must pay, then packaging enters into a field of very great danger for itself, the product it shelters and our economy. It has not gone too far in this direction except for a few products. Perhaps this somewhat slight trend toward over-glamorization and over-packaging, with resulting overpricing, has very nearly reached its limits.

## Children

From a marketing viewpoint, the population fringes have been assuming more and more importance to sales managers. There has been a great deal of discussion and also product development for the rapidly growing market for older people.

New figures just released by the Bureau of Census indicate an equally expanding market for children of all ages. This report shows a sharp upward revision of previous predictions.

At the beginning of 1950 the Census Bureau placed the number of people at 51,000,000, with the predicted expansion in 1960 to 54,000,000. Now the prediction for 1960 is 69,202,000.

In this classification children include the entire population under 21 years of age.

## Showmanship

Maybe this industry did not invent showmanship in business, but for many years it included some of the leading practitioners in this art. The decline and fall of showmanship in business may be attributed to some kind of a maturity in our civilization or it may have come about when the great power of the printed page was first discovered by business men. But certainly, no one can say people still do not delight in this kind of extrovertiveness in business. If we needed proof, the success of Hadacol and the somewhat startling stories and magazine feature articles which have discussed this phenomena would be ample proof that a love of showmanmanship still exists in the heart of the American people.

For those who have not read the romantic story of Hadacol, this is a new proprietary medicine, owned by Louisiana State Senator, Dudley J. Le Blanc, which is reported to be chalking up sales of over $2,000,000 a month after a very brief life.

Hadacol is now on the road with a show featuring Hollywood's Mickey Rooney, Connie Boswell and Roy Macuff. The price of admission is a box top from Hadacol, which sells for $1.25. On the first night stand in Pelican Park in New Orleans attendance exceeded 25,000 and reports say an additional 25,000 were turned away. This appears to be happening every time the show hits a city. In the Caravan are 100 trucks which are packed with $2,000,000 worth of Hadacol for retail delivery along the show's route. Thirty-four Fords, Lincolns and Mercurys, donated by the Ford Motor Co., carry troupe personnel and the members of two bands. In the rear of this imposing procession are two old-fashioned calliopes.

Just about this time there is another example of showmanship in France. Over there, is a new drink called Clairet. This is a wine made by a process of interrupted fermentation, which means, as we would guess, that it is part way between ordinary grape juice and "Vin Ordinaire." It sells for about the same price as beer.

Clairet is being introduced in Paris in a way that seems to have captured the open enthusiasm of the people of the city. Casks of this wine were set up in the Place du Tertre and citizens of Paris were invited to get as much as they liked for free.

As evidence of the respect that the province of Bordeaux has for this new wine, representatives of the province

appeared in full uniform accompanied by representatives of the company in equally impressive regalia. Scarlet and purple velvet robes and ornate hats gave almost a medieval air to this party.

Perhaps it is true that showmanship in American business, and certainly every radio listener will agree that there is plenty of it, has become too impersonal and too absorbed in a thin impression upon a multitude of people rather than a succession of small intimate contacts. At any rate, it seems to us that there would be a little more interest and a little more flavor in business if we could restore and revitalize some of the personal showmanship of the last century.

## Display

Here is a quote that salesmanagers could do well to ponder. In a recent magazine article, J. K. Caddelle, display director of Allied Stores Corp., said, "In spite of the fact that retailers spend hundreds of thousands of dollars annually to sell their wares to the public by way of newspapers, magazines, radios, television and other promotion media, display is still in the enviable spot of being the medium closest to direct customer contact."

For the benefit of Mr. Caddelle and other display directors and managers, we might add that while a majority of manufacturers would certainly agree with him, they would also be compelled to add that in general practice display has been the most wasteful of all advertising mediums.

Manufacturers would, without question, spend a great deal more money on the quality and quantity of display materials if they could secure some reasonable system of distributing it, with reasonable assurance that the retailer, who accepts displays, would feel under obligation to put them to some use.

## Allowance

In the proposed trade practice rules for the grocery industry to be considered soon at a hearing before the Federal Trade Commission, advertising allowance policy is covered with a strict interpretation of the Robinson-Patman Act.

These rules go into detail in citing examples of how advertising, promotional and other allowances must blanket the entire distribution even when the retailer, who receives this aid, is in no position to render proportionately identical service to the supplier in return for such allowances.

## Union Salesmanship

Business can get badly scrambled up when things happen, but there is an old law that says that for every action there is a reaction. Some of these reactions can be very interesting to observe. For instance, there has been a strike in the soda ash plants for several months and this strike has had a number of reactions that not many of the men in the street would ever guess could happen.

How many of us stop to think that without the water softeners provided by these chemical companies the steam locomotives of our railroads would have to puff to a standstill. Nearly everyone in this trade knows that without soda ash you can't make a bottle. It is said that soda ash accounts for about 20 per cent of the price of the bottle.

According to a report, the distillers feel that they are less favored by bottle makers than other customers, such as drugs, cosmetics and foods where there is less standardization, and that the soft drink folk are not particularly worrying since most of the bottles they use are based on returns. As a defensive measure, some of the larger distillers entered the market for the small amount of soda ash floating around in the hands of traders and importers and by the right kind of bidding come out with enough to protect their supply. According to an executive in one distillary, this extra price for soda ash only means a few cents extra a case and, he said "all we are doing is spending cents to make dollars on liquor."

All this sounds very well, particularly the statement that this would not cause a price increase in liquor. But it seems to us a tacit acknowledgement by the customer that the chemical union may have a sound basis for increasing soda ash prices so far as this one type of customer is concerned. At the same time we can just imagine the howl that would have gone up from some of these distiller buyers if a glass salesman had gone to them before this episode and had asked for an increase in bottles which only amounted to a few cents a case.

With increasing frequency labor unions are jumping in in an effort to save a market in which many times they must share responsibility for losing. Most of these efforts by unions have been in cooperation with management, and even when they have gone off on a tangent of their own it has not conflicted with the general sales policy of management. It may be pessimistic to say that as labor becomes more conscious of increasing power and in some industries of complete monopoly, that this will increasingly make them intervene in selling the goods they produce, and the time will come when they will take the ball completely in their own hands in an industry selling campaign and leave management gasping on the side lines.

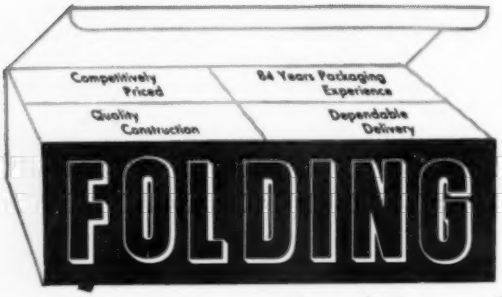
An instance of the intervention of labor in selling in a way that must have management's full approval is the present situation in the hosiery industry. In recent announcements of this industry's Association, a survey showed a continuing tendency among women to go without hosiery. Now a situation is developing among teen-age-girls who are showing a growing tendency to refuse to wear stockings to school. Any one who is acquainted with teen-agers in high school know that so far as the wearing apparel goes, there is probably the strongest exhibition of herd instinct and herd conformity that we have anywhere in this country. According to a group conference between teen-agers and their mothers at Gimbel Bros., the reason why they are refusing to wear nylons to school is that, "You can't help getting runs on those school chairs."

This has the hosiery union in hysterics. They believe that the wearing habits developed by the teen-agers today will be reflected in the future and the industry had better do something about it right now. According to their official organ, "There is no reason to have a rough chair in school or for that matter in offices or anywhere else. The industry's bread and butter is directly affected." The union suggests a promotion among Parents-Teachers Organizations, a promotion to School Boards and a national campaign in consumer publications and newspapers to rebuild school chairs.

We suppose that it is now up to the furniture union to decide whether the dilemma of the hosiery workers will interfere with any one of a number of complex jurisdictions or ratings or something else that is important unionwise. Probably a compromise will be worked out that will make everyone happy.

But it does seem to us that this episode is a rather clear indication that unions are beginning to get sensitive about markets, are beginning to take an interest in markets and are ready to become vocal and active in marketing. Maybe management should get a hold of a copy of Aesop Fables and read again the story of the fellow who in-

# DRUG AND COSMETIC FOLDING CARTON USERS ARE PROFITING

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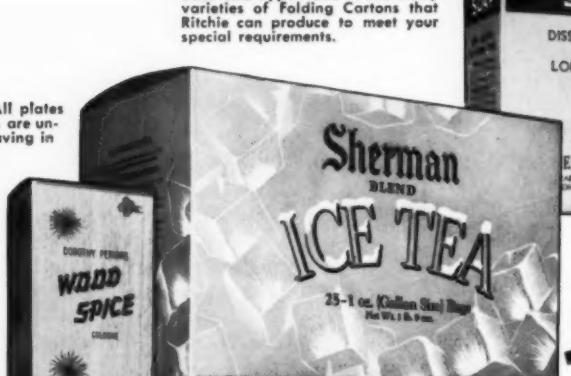


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A Source of "Packaging Satisfaction" Since 1866

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New York • Los Angeles • Detroit • Dallas • Denver
Providence • St. Louis • Cleveland • Jacksonville

**W. C. Ritchie and Company**
**8820 Baltimore Ave., Chicago 17, Ill.**

Please send my copy of brochure "101 Ways to Get Better Packaging", also suggestions and quotations on ☐ Set-Up Boxes ☐ Fibre Cans ☐ Transparent Boxes ☐ Folding Cartons. ☐ Please have a Ritchie Representative call.

SIGNED ..... TITLE .....
COMPANY NAME .....
STREET ADDRESS .....
CITY ..... ZONE ..... STATE .....

5270 D

vited the camel to put his head in his tent.

### What it Takes

Four drug trade products, that is Anahist, Amm-i-dent tooth paste and tooth powder, Inhiston and Schick, are among the 50 newspaper advertisers whose 1949 campaigns are included in the 12th annual "Product Book of Newspaper Advertising."

Just as an example of what it takes to launch a new product in a field that is likely to become very competitive, and where speed is very much of the essence, a brief glance at a couple of these campaigns is interesting.

Anahist Co. in launching its product of that name used an every-other-week campaign of 1360 and 1000 line adds in 92 principal cities between November 9 and the end of 1949. In all, 109 weekday and 70 Sunday newspapers were employed with an expenditure of $283,000. Six weeks after the start of the Anahist drive, consumer studies in three cities showed that 10 per cent of the families had bought the product. By this time Anahist led the market, although by that time six other brands had already hit the market. Only one sales executive working without a field sales force was operating through this period.

When the Union Pharmaceutical Company introduced Inhiston, Western Union messengers delivered literature and two packages of the product to all drug stores in cities of 25,000 population. At the same time shipments went out to wholesalers Two days after this sampling advertising broke with spreads in New York City tabloids. As distribution progressed, full page ads were placed first on a twice-monthly-schedule then weekly in 75 newspapers in 60 cities. This campaign was expanded in approximately half page space to other markets eventually extending into 164 weekday and 22 Sunday newspapers. The total newspaper cost was $346,355.

Block Drug Company's Amm-i-dent campaign ran first in a four-city test and then expanded on a vast market-by-market schedule. By May, after a February start, advertisements were appearing in 256 week day and 69 Sunday newspapers with ad sizes ranging from full page to 1000 lines. The tooth paste was introduced with a similar plan from July through October. Total newspaper cost, which was 50 per cent of the media appropriation, was $739,000.

### Department of Commerce Monthly Retail Trade Report

*Retail sales of all kinds in drug and department stores showing sales for the month of July 1950 as compared with the same period in 1949.*

| | *Department Stores* | *Drug Stores* | | *Department Stores* | *Drug Stores* |
|---|---|---|---|---|---|
| Atlanta | +34 | –2 | Minneapolis | +31 | 0 |
| Baltimore | +18 | 0 | Milwaukee | +21 | +1 |
| Birmingham | +23 | +3 | Newark | +25 | –5 |
| Boston | +21 | +2 | New York | +19 | –1 |
| Chicago | +18 | –1 | Philadelphia | +20 | +1 |
| Cincinnati | +29 | –2 | Pittsburgh | +26 | +3 |
| Cleveland | +23 | +6 | Providence | +17 | +2 |
| Dallas | +39 | +9 | St. Louis | +26 | –3 |
| Detroit | +29 | +8 | San Francisco | +28 | +4 |
| Los Angeles | +33 | –6 | Seattle | +20 | +4 |

### Direct Mail

The dollar volume of direct mail advertising used by American business for the first six months of 1950 was $434,184,751, according to the figures of the Direct Mail Advertising Association.

### Point-of-Sale

According to Grocer's Digest, two-thirds of independent retail grocers use 50 per cent or more of the free display materials which manufacturers offer them.

Some 32.6 per cent of retailers said that they used about three fourths of the materials; 32 per cent said they utilized half of the displays; 15.2 per cent reported that they put up only one-quarter of the material received.

### Trade-Marks

In today's packaging, according to Jim Nash in an address before the Label Manufacturers' National Association, there must be an identification by a trade-mark that can readily be identified, easily remembered and one that catches the fancy of the customers.

"The designing of a trade-mark is not a casual experience," he added. "It requires ingenuity. The trade-mark must have a shape all its own. It must have individual character. Therefore it should not be a circle, square or triangle or any other conventional geometrical pattern. These have been used so frequently that they no longer have distinctive character."

"A trade-mark should be such that it can be reproduced in any color, in black and white, and still retain its essential characteristics. It should be such that it can be reproduced in any size, from a size designed for a tiny candy roll to a size designed for a packing case."

### All in One

So far as we know, the first installment plan for the purchase of a co-ordinated cosmetic treatment through a retail store has been put into effect by Hess Bros. of Allentown, Penna.

Max Hess, Jr., 39-year-old president of the Hess store, who has built up a business close to $15,000,000 a year in a town of just a little over 100,000 population, says that the new approach was designed with the aim of "not only increasing business, but of developing business where it did not exist before through offering a new conception of service and ability matching and exceeding any competitor."

"By offering women a complete line of cosmetics, lipsticks, deodorants, astringents and creams, etc., she may have longed for but could never afford to get at any one time, we believe we will create a new market."

"Most women today buy cosmetics in small quantities simply because they cannot afford or don't want to put down too much money at a time."

Under this plan a Hess customer will be able to purchase a full line of Helena Rubinstein, Elizabeth Arden, Dorothy Gray, Charles of the Ritz, Frances Denney, Du Barry, and Jacqueline Cochran with no down payment but with a payment of 50 cents a week and no carrying charge.

### New Products Cost

According to Clarence Francis, Chairman of the Board of General Foods, this company spends very nearly $2,500,000 a year on research.

Since the end of the war the company has tried out and buries over 150 products.

We are fortunate, said Francis, if we can develop one successful product for every 20 failures. This means progress.

# 14 *ways to pack appeal*

## in low-cost containers!

These fourteen container ideas give you a hint of how Scovill's vast production facilities can solve your container problem with utmost beauty and utility . . . *at no sacrifice of economy.*

We're geared to quickly adapt to your special design needs this wide range of ready-made items . . . in plain, satin, or highly-finished metals. If you do not see an answer to your problem here, our engineering staff will create unique, new effects for you . . . yet keep a close eye on cost.

Just mail the coupon, checking the number or numbers of interest to you, or stating your problem, and leave the rest to us!

---

SCOVILL MANUFACTURING COMPANY
Drug and Cosmetic Container Division
63 Mill Street, Waterbury 20, Conn.

Please send full details of your design and manufacturing facilities.
I am interested in:

1 & 2 ☐ Perfume Holder
3 ☐ Bobby Pin Holder
4 ☐ Cigarette Lighter
5 ☐ Powder Dispenser
6 ☐ Powder Pencil
7 ☐ Powder Box
8 ☐ Toothbrush Container
9 ☐ Shaving Brush Container
10 ☐ Lotion Pump
11 ☐ Lotion Dispenser
12 ☐ Concealed Thread Jar Cap
13 ☐ Concealed Thread Bottle Cap
14 ☐ Serum Clamp

My problem is none of the above, but . . . . . .

. . . . . .

NAME . . . . . .

COMPANY . . . . . .

ADDRESS . . . . . ZONE . . . . .

CITY . . . . . STATE . . . . .

*Best-selling brands in leading stores have*

SCOVILL-MADE *Containers*

A PRODUCT OF SCOVILL

# NEW PRODUCTS AND NEW PACKAGES

ABBOTT LABORATORIES has introduced two new products, Desoxyn Hydrochloride, for parenteral veterinary use and Methyl Testosterone Sublingual Tablets which contain synthetic crystalline methyl testosterone for oral administration. The former is useful for its vasopressor effect and stimulation of higher cerebral centers and is indicated to restore and maintain blood pressure during or after surgery, to counteract effect of anesthetic overdosage or prolonged sedation, and to counteract depressed consciousness and restore blood pressure to normal in parturient paresis. The Methyl Testosterone Tablets should be placed under the tongue or in the space between the gums and the cheek. This causes the ingredients to disintegrate and dissolve slowly through the buccal surface.

AYERST, MCKENNA & HARRISON LIMITED has offered "Premarin" with Methyltestosterone, a combination of estrogen and androgen designed to utilize the complementary effect of both these hormones on certain tissues, and their neutralizing properties on certain others. Combined estrogen-androgen therapy may be used in the treatment of osteoporosis, fractures, malnutrition, acromegaly, and other conditions where the cooperative effect of both hormones is preferred to the action of each steroid employed singly.

BURROUGHS WELLCOME & CO. INC., has announced the introduction of "Vasoxyl-P" brand Methoxamine and Procaine Injection. This combination of the new pressor drug "Vasoxyl" with a local anesthetic is for the convenience of those who wish to give the local anesthesia at the site of lumbar puncture, and to make the intramuscular injection for pressor action, at the same time, as a single operation. After injecting intradermally 0.1 to 0.2 cc. of the solution the needle is inserted deeply into the muscle tissue and the balance of the solution is injected. This is not intended for intrathecal administration and is not to be used to produce spinal anesthesia.

CIBA PHARMACEUTICAL PRODUCTS, INC., is issuing a new, large-size economical vial of Coramine, in 20 cc. multiple dose vials, because in certain conditions Coramine is now being administered in larger doses than before.

COTY announces that its Christmas 1950 gift collection will range from the Make-up Duo containing Coty lipstick and Air Spun face powder ($2.00) to $14.75 for the De Luxe Gift Chest of glamour aids.

DAGGETT & RAMSDELL are introducing the Gay Manhattan series of toiletries based on their Gay Manhattan fragrance. Beauty Film and Pressed Face Powder in enchanting shades, giving the skin a radiant glow; Cake Rouge and Lipstick in new complementary colors; Deodorant Cologne for fragrant daintiness; the popular Toilet Water in a newly designed bottle; and the Gay Manhattan Perfume packaged in a window gift box.

GUERLAIN, INC., announces the return to the American scene of its richly perfumed Talcum Powder. It is presented in six fragrances, re-appearing in Shalimar, L'Heure Bleue, Mitsouko, Liu, and Vol de Nuit. It will be introduced for the first time in Fleur de Feu to match Guerlain's Fleur de Feu perfume which was introduced about a year ago.

LANOLAVE LABORATORIES announce the availability of Lanolave, a new rubbing alcohol compound with lanolin and wintergreen. The aromatic wintergreen content is said to invigorate, and the lanolin content, to benefit tender and fever-parched skin. The sixteen-ounce Duraglas bottle and maroon plastic closure are supplied by Owens-Illinois Glass Company.

LEDERLE LABORATORIES have developed a vaccine for the prevention of mumps, Mumps Vaccine Lederle. It is designed primarily for the immunization of large groups of children or adults, housed together in close quarters, as in schools, camps, institutions, or military installations. Because it confers immunity for only about one year, and because annual revaccination is necessary, it is not recommended for routine use in the prevention of mumps in childhood.

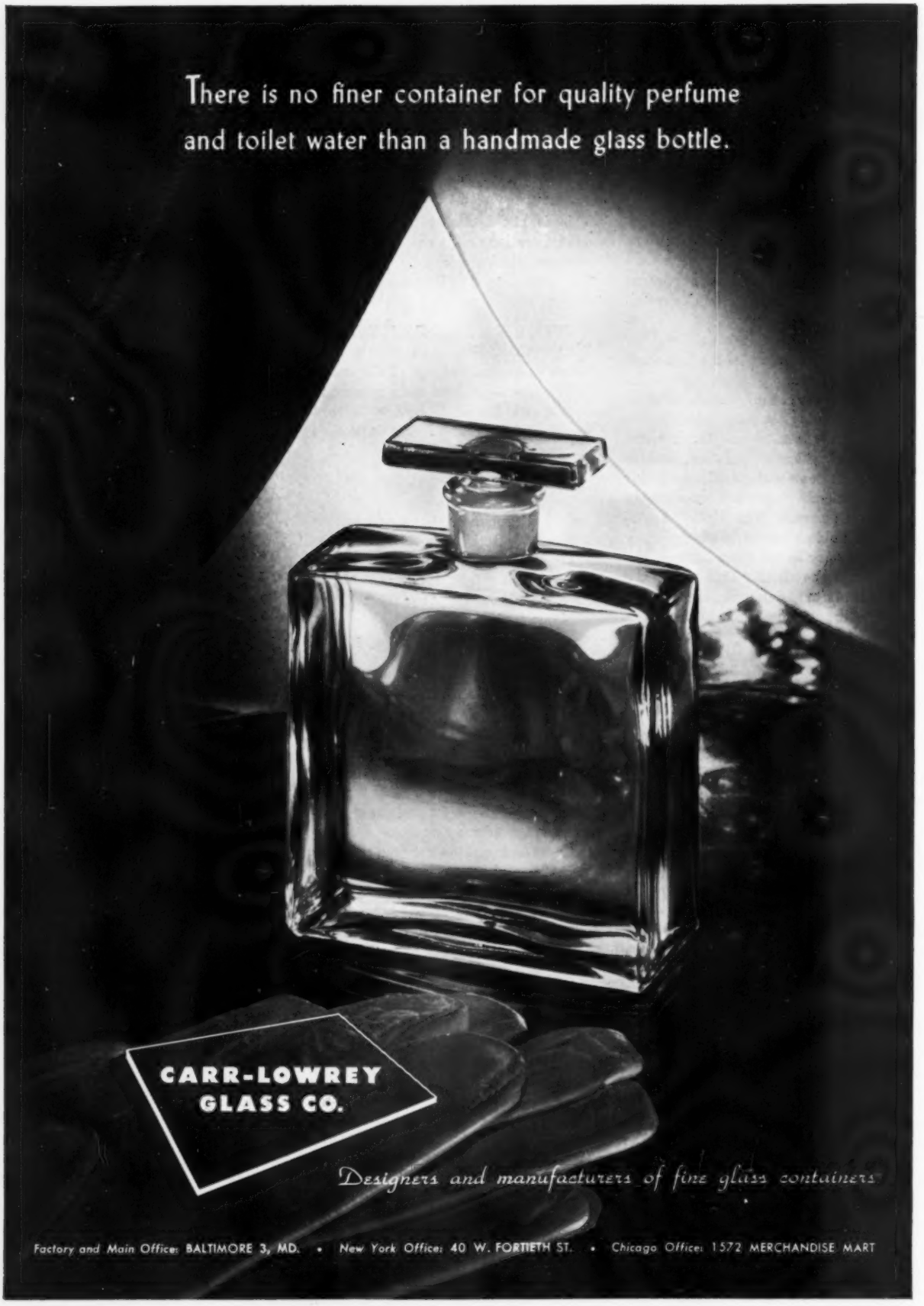
Lederle has also prepared Aureomycin Crystalline Capsules Veterinary, for use by or on the prescription of veterinarians in treating small animals with respiratory infections, gastrointestinal infections, bacteriail infections associated with distemper, and other conditions.

PRINCE MATCHABELLI has added a new perfume to its family of fragrances, called "Beloved."

THE MENNEN COMPANY has announced that the new "Easy-Flo" dispenser will be included free of charge with every purchase of Mennen Baby Oil for a limited time. Made of white plastic, the dispenser screws securely on top of the bottle, ready for instant use. By pressing lightly on the plunger with one finger, leaving one hand completely free to smooth on the oil, the desired amount of oil can be applied.

PARKE, DAVIS & COMPANY is introducing Penicillin S-R with Dihydrostreptomycin, a combination of solu-

*(Continued on page 496)*


There is no finer container for quality perfume
and toilet water than a handmade glass bottle.
CARR-LOWREY
GLASS CO.
Designers and manufacturers of fine glass containers
Factory and Main Office: BALTIMORE 3, MD. • New York Office: 40 W. FORTIETH ST. • Chicago Office: 1572 MERCHANDISE MART

# DR DRAKE *-a friend indeed when children have coughs due to colds!*

For more than 60 years, Dr. Drake's Cough Remedy* has been used by millions of mothers to relieve children's coughs due to colds. Dr. Drake's is made especially for children . . . and they really like this pleasant-tasting remedy.

**FOR** many years, leading manufacturers of drugs and cosmetics have depended on Crown Closures for sealing their products. They know through experience that when they come to Crown, they are sure of getting the closures and liners that are *scientifically* correct for their specific product.

If you want to be sure your closure is "right" for your products . . . talk to Crown. Our years of accumulated knowledge of scientific sealing methods is available to all users of closures without cost or obligation. Crown Cork & Seal Company, Baltimore 3, Maryland. *World's Largest Makers of Metal Closures.*

## CROWN CLOSURES

*Approved by millions of housewives*

**Dr. Drake's Cough Remedy is a product of The Glessner Company, Findlay, Ohio. The closures used on this product are Crown Screw Caps, with the famous patented Deep Hook Thread.*

# New Products and New Packages

(*Continued from page 493*)

ble and repository types of penicillin. The streptomycin derivative has substantially the same antibacterial properties as the parent drug and somewhat lower toxicity. It is indicated in infections due to gram-positive and gram-negative organisms, and is particularly useful where mixed infections are involved.

Parke, Davis also announced that its Chloromycetin (Chloramphenicol, Parke-Davis) is now supplied in Kapseals containing 250 mg., in packages containing 16 Kapseals, and in bottles of 100.

PATRON CHEMICAL CORPORATION is presenting Quit, a painless adhesive tape remover which releases surface tension between skin and tape and removes the adhesive tape with no black, gummy residue left on the skin. It may be used effectively on single-layer or multi-layer tapings. The solution is packaged in squeeze bottles equipped with a spout, permitting drop-by-drop or flow application. The product is sold in a 2-oz. applicator at 59c and in a 4-oz. economy size at 90c.

CHAS. PFIZER & CO., INC., has made available an injectable form of terramycin, Terramycin Intravenous. It is said it will be useful in the treatment of hospitalized patients who cannot take the customary forms of oral antibiotic medication. Terramycin Intravenous is available in two package sizes, containing either 250 mg. or 500 mg. of sterile Crystalline Terramycin Hydrochloride.

SHARP & DOHME, INC., has released two new products, "Pentresamide" Tablets, a combination of Potassium Pencillin G with the three most soluble, least toxic systemic sulfonamides (sulfamerzaine, sulfadiazine, and sulfamethazine) and "Topaminic," a new antihistaminic, analgesic cream for prompt relief from acute itching due to atopic and contact dermatitis, and a variety of other allergic skin disorders.

Designed for simultaneous treatment of infections where oral administration of pencillin and the sulfonamides is indicated, "Pentresamide" is said to be effective against a wider range of organisms than either sulfonamides or penicillin alone. It is recommended for treatment of pneumonia, gonorrhea, mastoiditis, scarlet fever and urinary tract infections, and can also be used as a prophylactic measure before and after tooth extraction, tonsillectomy, cesarean section and minor surgical procedures.

SCHENLEY LABORATORIES, Inc., is ready to distribute Aquacillin-A. S., an aqueous suspension of crystalline procaine penicillin G, ready for instant use. It is stable at room temperature for 12 months and may be carried in the physician's bag at temperatures up to 95 degrees for as long as two weeks.

Schenley has also announced that Sedamyl, used as a sedative during periods of emotional and nervous tension, is available in dispensing bottles of 1,000. Another packaging change has occurred in Avosyl, which was recently made available in a doubled potency (0.5 gm. tablet) dosage form. Avosyl has been recommended as a useful drug in the syndromes of every-day practice including low back pain, sacro-iliac and allied disorders.

SMITH-DORSEY COMPANY announces the release of their new pyranisamine 8-Bromtheophyllinate 50 mg. tablet, Sanbromal. It gives relief from the distressing premenstrual symptoms such as headache, breast fullness, abdominal distension, low back pain, extreme nervousness and the feeling of tension or of being unwell. It has also been found to be effective in motion sickness.

SMITH, KLINE & FRENCH LABORATORIES are introducing "Edrisal with Codeine," which is particularly effective in dysmenorrhea, early pain in malignancies, and following surgery or childbirth. It is also indicated in common painful conditions such as colds, grippe and sinusitis; sprains, bruises and lacerations; injuries to extremities; common or migraine headache; shingles; after minor surgery; and after dental extractions.

SKF also announces that "Eskacillin" is now available in two strengths, 50,000 units of crystalline penicillin G per 5 cc. and 100,000 units. "Eskacillin is recommended for treatment of secondary bacterial infections of the upper respiratory tract due to penicillin-susceptible organisms.

STUART INC., has introduced Teez, a new non-greasy stick cologne which is packaged in a handy glass container. Owens-Illinois Glass Company supplies the Duraglas container and closure.

THE UPJOHN COMPANY has prepared Biosulfa, Compressed Tablet, useful in the treatment of pneumonias, Vincent's angina, Gonorrhea, follicular tonsillitis, mastoditis, and other infections caused by organisms susceptible to penicillin and the sulfonamides. Each tablet contains penicillin G potassium, sulfadiazine, sulfamerazine, and calcium carbonate. The use of sulfamerazine and sulfadiazine provides the advantages of combined sulfonamide therapy in minimizing the danger of crystalluria or renal complications.

WYETH INCORPORATED has introduced Artisone Acetate, Injection, a steriod compound useful in alleviating the local effects of rheumatoid arthritis. In extensive clinical trials, Artisone has shown most promise for patients with mild to sever afebrile rheumatoid arthritis of less than ten years' duration (particularly in females 20 to 40 years old) and for stiffness of muscles and tendons.

# NEW PERFECTION
## DROPPING PARTS
### *meet EVERY*
## "Satisfaction Test"

| | |
|---|---|
| *QUALITY* | A-1 |
| *UNIFORMITY* | A-1 |
| *PERFORMANCE* | A-1 |
| *CLEANLINESS* | A-1 |
| *SERVICE* | A-1 |

**#1**

Non-rolling, extra-depth, Bakelite cap; thick-flange rubber bulb; Saftee-ball glass.

**#3**

Regular plastic cap; thin flange rubber bulb; semi-blunt glass.

**#4**

Metal cap; AMEKINE oil-resisting rubber bulb; blunt glass.

### *They're A-1 with your customers, too . . . assuring you repeat sales!*

When you sell a product that pleases and satisfies your customers, you're assuring yourself of their goodwill and continued patronage. New Perfection Dropping Parts help to give you that kind of a product. They are convenient, attractive, dependable—manufactured and assembled under careful and constant inspection to assure the highest possible quality.

**RUBBER BULBS** are supplied in many styles and colors. Oil-resisting AMEKINE synthetic rubber is used for oil preparations; natural rubber is supplied for other products.

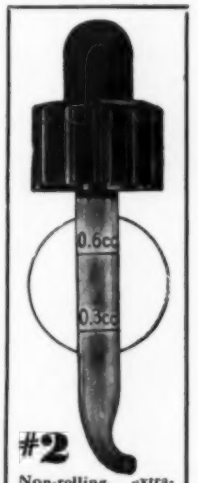
**CAPS** of plastic or metal can be furnished in a complete range of sizes and colors.

**DROPPER GLASSES** are available in a wide variety of styles and sizes; plain or CALIBRATED in any color to mark specific dosages.

• • • • •

We can make up dropping parts to fit your own bottles or we can supply bottles in an attractive modernistic style in Amber, Blue, Green, or Clear glass, complete with dropping parts, in the following sizes: 2 cc, ⅛, ¼, ½, 1 and 2 oz.

• • • • •




**#2**

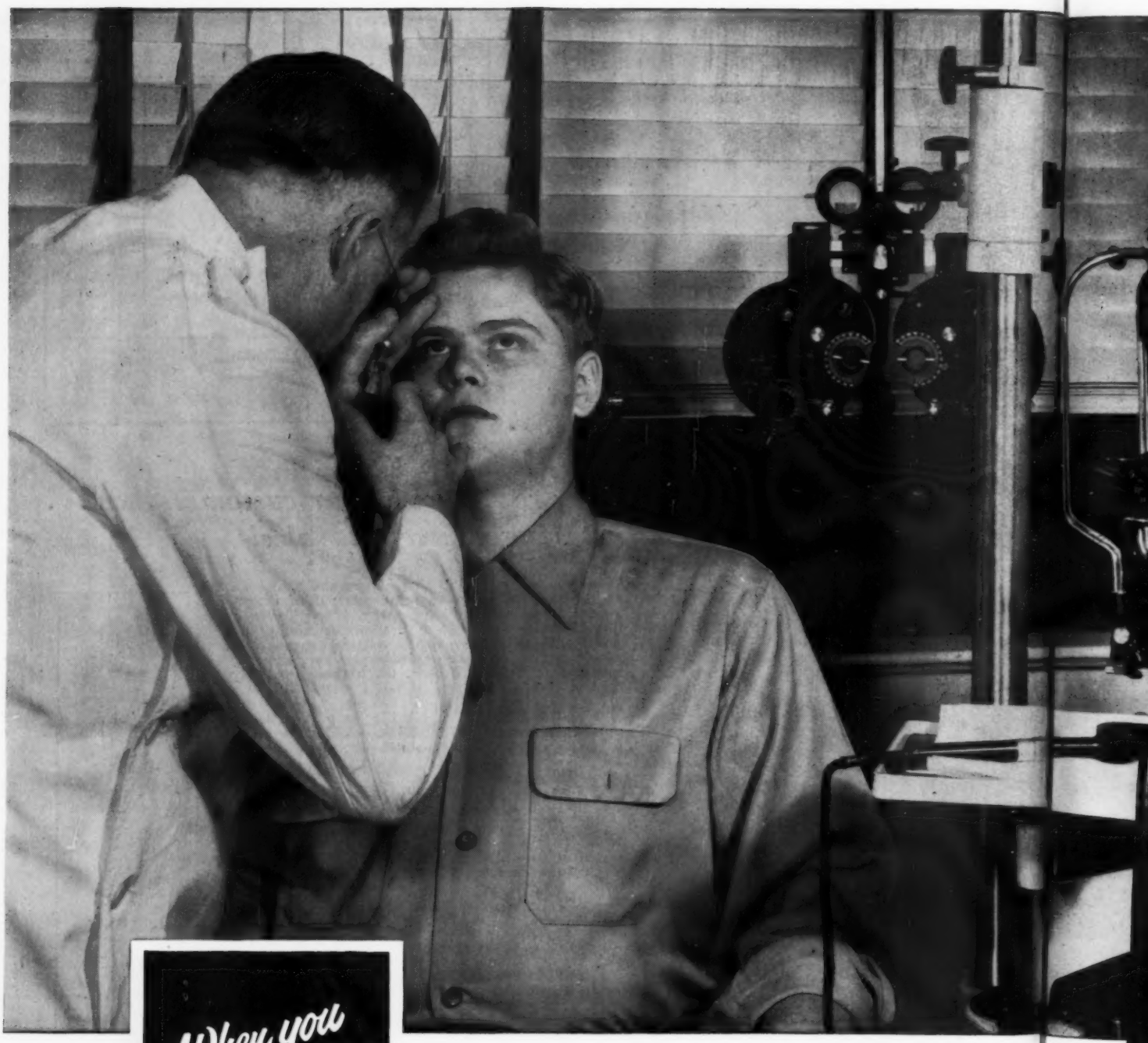
Non-rolling, extra-depth Bakelite cap; thick flange rubber bulb; special bent glass (calibrated in color.)

*Write for Samples and Quotations*

# PENNSYLVANIA
## GLASS PRODUCTS CO. INC.

**"Glass Goods of the Better Kind"**

430 N. CRAIG ST • PITTSBURGH (13), PA., U.S.A.



When you want the BEST go to the BEST

## And for Packaging it's GLASS

Nothing is more important in the packaging of your products than the protection of their purity, strength and other qualities. High in chemical durability, the glass package does not change your products. It will not leak, rust nor absorb moisture. Easy to open, easy to use, easy to reseal, it makes the most convenient package. The glass package may be transparent or not as required. It lends itself to individuality in size and shape hence is adaptable to any product. Preferred by consumers because it is safe, sanitary and convenient . . . by retailers because of its sales and merchandising advantages. Anchor Hocking Glass Corporation, Lancaster, Ohio.

# Anchorglass*

## DROPPER OVALS

*Anchorglass* Dropper Ovals are designed especially for easy, convenient packaging and dispensing of eye drops and other liquids that are packaged in small quantities. Supplied in both amber and emerald green glass they're available in 4 capacities—¼ to 2 ounces. *Anchorglass* Dropper Ovals, like all other *Anchorglass* containers, are the result of consistency in manufacture, uniform distribution of glass, accurate temperature control in annealing, quality control through laboratory tests and regular inspections. If you use or contemplate using dropper ovals let us submit samples and prices.

# ANCHOR*

## MOLDED CAPS

The *Anchor* Style N Molded Cap, when used with nipple and pipette will complete your "dropper package"—put your product on the market in the most attractive and convenient container possible. *Anchor* Molded Caps give dependable airtight, leakproof seals because their scientifically designed thread uniformly grips the underside of the glass thread and draws the liner down evenly over the top of the container finish. A patented liner retaining ledge and recess holds liners permanently captive; permits use of full-size liners which completely cover the glass sealing surface; prevents buckling, wrinkling or creeping of liners. Write us for more detailed information on the advantages and economies of *Anchor* Molded Caps.

*Reg. U. S. Pat. Off.

## For the BEST in Glass Packaging *it's*

# ANCHOR HOCKING

*"THE MOST FAMOUS NAME IN GLASS!"*

## to Anyone Developing or Improving a Product

Perhaps that new product calls for the use of white mineral oils, petrolatums or petroleum sulfonates.

If so, the time and effort of a top-notch team of petroleum-research chemists is at your disposal . . . without cost or obligation.

You can get this help simply by writing to Sonneborn. Outline what you hope to accomplish with white oil, petrolatum or petroleum sulfonates . . . what actual product-results you want. Please give full details.

Remember, there is no cost or obligation. Address your inquiry to White Oil and Petrolatum Division, L. Sonneborn Sons, Inc., 300 Fourth Avenue, New York 10, N. Y.

# Sonneborn

*Leads through Research*

•

**WHITE OILS • PETROLATUMS • PETROLEUM SULFONATES**

# NEWS...

## DCAT Elects Officers

Charles P. Walker, Jr., director and general sales manager, Chas. Pfizer & Co., Inc., was elected chairman of the Drug, Chemical and Allied Trades section of the New York Board of Trade during the annual meeting at Shawnee-on-Delaware last month. Other officers elected include Charles M. Maculey, vice-president of Pro-Phy-Lac-tic Brush Co., as vice-chairman; Hugh S. Crosson, McKesson & Robbins Inc., re-elected as

CHARLES P. WALKER

treasurer; Helen L. Booth, re-elected as secretary; and James G. Flanagan, vice-president, S. B. Penick & Co., was appointed counsel.

The retiring chairman, Harold C. Green, L. Sonneborn Sons, Inc., was elected section representative to the board of directors of the New York Board of Trade. The personnel of the new executive committee, exclusive of officers, includes Murray Breese, Murray Breese Associates; Ralph A. Clark, J. T. Baker Chemical Co.; Stanley I. Clark, Sterling Drug Inc.; Harold F. Cummings, Vitamerican Oil Corp.; Donald S. Cushman, Innis, Speiden & Co.; Russel J. Fosbinder, the Maltbie Laboratories, Inc.; Claude A. Hanford, Pharmaco Inc.; J. David Hayden, Gelatin Products Inc.; J. Wayne Luther, the Mennen Company; George S. McMillan, Bristol-Myers Company; W. Boyd O'Connor, Ayerst, McKenna & Harrison, Ltd.; Fred G. Singer, E. I. du Pont de Nemours & Co.; Sydney N. Stokes, Merck & Co., Inc.; Stephen F. Urban, E. R. Squibb & Sons; and Lloyd I. Volckening, the Ivers-Lee Company.

## FWDA Annual Convention Plans

The 35th annual convention of the Federal Wholesale Druggists Association will be held October 22 to 25 at the Greenbrier, White Sulphur Springs, West Virginia. Reg Cary, of the Drug Trading Company, Ltd., Toronto, and president of the FWDA, will preside.

Business meetings will start on Monday, October 23, and among the speakers will be the following: Leo M. Cherne, executive secretary of the Research Institute of America who will talk on, "Where Do We Go From Here?", Morris R. Shlensky, executive vice-president and general manager of the Katz Drug Company, who will speak on "Revolution in the Drug Industry—Let's Face It," and Raymond Moley, professor of Public Law at Columbia and a contributing editor to Newsweek Magazine, who will discuss "Fighting Communism Without Imitating It."

Chairmen of the various committees of the convention are T. L. Floyd-Jones, Lederle Laboratories, Manufacturer's Section; J. Wayne Luther, the Mennen Company, Program Committee; C. Hanford, Pharmaco Company, Reception Committee; T. Ginty, Emerson Drug Company, Registration Committee; E. G. Gerbic, Johnson & Johnson, Golf Committee; and G. S. MacMillan, Bristol-Myers, Entertainment Committee.

The Convention will close with the election of officers for the next year.

## Bromo-Seltzer Case Settled

The famous case of the Federal Trade Commission against the Emerson Drug Company, has finally been settled through a stipulation which represents virtually complete vindication for the maker of Bromo-Seltzer. The stipulation means that instead of stating, as Emerson has done voluntarily for ten years in publication and radio advertising, "Caution: Use only as directed" (or similar phraseology), it will now substitute in advertising, "Follow the label, avoid excessive use."

"We are pleased," said Kenneth A. Bonham, president of the Emerson Drug Company, "that this matter, at long last, has been dismissed and has ended harmoniously. We feel that we have been vindicated. We have no objection at all to making the very minor change in our advertising that the stipulation provides. While we are satisfied with the outcome, we naturally regret the great outlay in money and energy required to bring about a result that might have been obtained far more expeditiously and certainly less expensively through informal negotiation. The stipulation, in fact, is the result of just such informal negotiation, made possible by new procedures recently adopted by the reorganized FTC. The new, cooperative approach is welcomed, since it tends to safeguard both consumer and business interests without undue expenditure of taxpayer and corporate funds.

"In the stipulation, we also agree not to represent the product as a remedy for sleeplessness. The one advertisement making this claim appeared in one schedule in 1939. No such representation had been made before, nor has it been made since. We also agree that the product alkalizes only stomach acidity, which was the meaning we

K. A. BONHAM

intended to convey in advertising stating, "Bromo-Seltzer alkalizes.'"

This was one of four cases brought some years ago by the Federal Trade Commission, the three others cited at the time being Stanback's Headache Powders, BC Headache Powders, and a product of the Capaudine Chemical Company. Dragging these companies all over the country at great expense (as described in our January 1947 issue) the Commission finally forced Stanback's and BC to give up their formulas containing bromine and acetanilid and change to the common APC formula which any number of other products are based on. In those cases the Commission dropped the cases when the companies changed formulas approved by the Food and Drug Administration.

## Kunz Receives Cosmetic Award

Dr. Eric C. Kunz, president of Givaudan-Delawanna, has been awarded the 1950 medal of the Society of Cosmetic Chemists. He will receive the award at the Society's annual dinner meeting on December 5.

# Baker announces increased capacity...

# more AMMONIUM SULFATE

# to meet the requirements of exacting users

Our ability to provide measured purity within a narrow range of tolerances has continually increased the demand for Baker's Ammonium Sulfate, particularly for syringeable products.

To meet the increased demand for this important chemical, the J. T. Baker Chemical Co. has enlarged its capacity with expanded production facilities. An additional plant with new stainless steel equipment of the latest design now makes available a more abundant supply of Ammonium Sulfate of extreme purity—assay 99.5% minimum $(NH_4)_2SO_4$—low in heavy metals content—of controlled pH—with low chloride content—factors of particular importance to manufacturers of biologicals and antibiotics.

When it is essential to keep heavy metals at a very minimum—when *measured purity* and *constant uniformity* mean less production difficulty—when your good name and the reputation of your product depend on your choice of vital ingredients—specify Baker's Ammonium Sulfate.

Baker's years of "know how" and Baker's added manufacturing facilities enable us to give service to additional manufacturers who require quality Ammonium Sulfate.

For further information and samples of Ammonium Sulfate or any of the long list of Fine Chemicals Baker has available, write Fine Chemical Division, J. T. Baker Chemical Co., Phillipsburg, New Jersey.

## Test Baker's for yourself and *COMPARE!*

## $(NH_4)_2SO_4$

### SPECIFICATIONS

***PURIFIED GRANULAR***

***F. W. 132.146***

| | |
|---|---|
| Assay $(NH_4)_2SO_4$ | 99.5% |
| Insoluble Matter | 0.010% |
| Residue After Ignition | 0.015% |
| Neutrality | Passes Test |
| Chloride (Cl) | 0.005% |
| Arsenic (As) | 0.0005% |
| Heavy Metals (as Pb) | 0.002% |
| Iron (Fe) | 0.001% |

# Baker's Chemicals

C. P. ANALYZED • FINE • INDUSTRIAL

ANALYZED REAGENTS Baker's FINE CHEMICALS

## Armour Estate Sells Heyden Stock

The estate of Barnard A. Armour, former president of Heyden Chemical Co. who died in December 1949, recently announced that it has sold all its holdings of the common stock of Heyden amounting to 401,470 shares at $15 each.

The Heyden Chemical Corporation purchased 225,000 shares of the stock, to be held in its treasury. R. W. Pressprich & Co., on behalf of certain clients and for its own account, bought 138,970 shares. The Heyden Chemical Management Committee and its associates purchased 37,500 shares.

## Fiske Named ADMA Vice-President

A. H. Fiske of Eli Lilly & Co. was elected second vice-president of the American Drug Manufacturers Association by the executive committee at a meeting last month. He succeeds the late John H. Smith of Chas. Pfizer & Co. The executive committee also elected James J. Kerrigan, president of Merck & Co., to the executive committee, filling the vacancy resulting from the death of Mr. Smith.

## Magnus Named Committee Chairman

Percy C. Magnus, president of Magnus, Mabee & Reynard, Inc., has been appointed chairman of the Essential Oils and Related Groups for the Greater New York Citizens Committee for the Hoover Report. In this office Mr. Magnus will enlist support to further the educational program for adoption of the recommendations of the bipartisan Hoover Commission for organization of the executive branch of the government. His acceptance was announced by Morris Sayre, president of the Corn Products Refining Company and chairman of the Greater New York Committee.

PERCY C. MAGNUS

Members of the board of directors of the Health Information Foundation and officers and guests, who met Sept. 19 in New York. Seated, left to right, are James J. Kerrigan, President, Merck & Co., Inc.; John E. McKeen, President, Charles Pfizer & Co., Inc.; Walter Beardsley, President, Miles Laboratories, Inc.; S. B. Penick, Sr., Chairman of Board, S. B. Penick & Co.; Admiral W. H. P. Blandy, President, Health Information Foundation; Dr. Mark Heibert, Executive Vice-President, Sterling Drug Co.; Earl S. Retter, Vice-President, Eli Lilly & Co.; John G. Searle, President, G. D. Searle & Co.; Carleton H. Palmer, Chairman of Board, E. R. Squibb & Sons; Merle Sanders, President, Snyder's Drug Stores; Leslie D. Harrop, Vice-President, The Upjohn Company; W. L. Dempsey, President, Sharp & Dohme, Inc. Standing, (left to right) Stanley Resor, President, J. Walter Thompson Company; Dr. William A. McLean, Merck & Co., Inc.; Foster C. McGaw, President, American Hospital Supply Corp.; F. S. Dickinson, Jr., President Becton, Dickinson & Co.; L. D. Barney, President, Hoffmann-LaRoche, Inc.; Dr. Ernest H. Volwiler, President, Abbott Laboratories; George Van Gorder, President, McKesson & Robbins, Inc.; Dr. A. William Lescohier, President, Parke, Davis & Company; Norman H. Pritchard, Montgomery, Hart, Pritchard & Herriott; Ferdinand Eberstadt, F. Eberstadt & Co., Inc.; Kenneth Williamson, Executive Secretary, Health Information Foundation; Howard B. Fonda, Sr. Vice-President, Burroughs Wellcome & Co., Inc.; Robert Dr. K. Cutter, President, Cutter Laboratories.

## Lewis Named by Walker Vitamin

Thomas P. Lewis has been appointed export Manager of Walker Vitamin Products, Inc., according to Myron Walker, president. He had formerly been associated with Maltine Pan-American Company and Chilcott Laboratories as assistant manager and assistant foreign sales manager, respectively. From 1934 to 1948 he served as export representative for Parke, Davis & Company in the Central American and Caribbean areas, and assistant branch manager at Manila, P. I. in 1941.

THOMAS P. LEWIS

## Lemke Builds Procaine Plant

B. L. Lemke & Co., Lodi, N. J. has completed a new manufacturing unit capable of producing annually 120,000 pounds of procaine base and procaine hydrochloride.

## Dr. Lewis Named to U.S.P. Committee

Dr. Thomas Lewis, S. B. Penick & Co., has been elected a member of the U. S. P. Revision Committee to fill the vacancy caused by the death of Dr. E. L. Newcomb. This action was taken at a meeting of the revision Committee held in New York September 22 and 23. The Committee decided that, for the present, it was not necessary to reduce the amount of glycerine in U. S. P. preparations.

Chairmen of the ten Subcommittees were named: Scope, William T. Salter; Posology, Windsor C. Cutting, with William Dock as Associate Chairman; Biologic Assays and Tests, Roland H. Noel, with Leroy D. Edwards as Associate Chairman; Sterile Products, Edgar B. Carter; Pharmacognosy, Herbert W. Youngken, with Thomas Lewis as Associate Chairman; Alkaloids and Heterocyclic Compounds, Joseph Rosin, with Arthur Osol as Associate Chairman; Aliphatics and Inorganic Compounds, Albert Q. Butler; Cyclic Compounds, George D. Beal; External Preparations, Louis C. Zopf, with Leslie M. Ohmart as Associate Chairman; Internal Preparations, Melvin W Green.

## Smith Named to Lambert Board

A. Craig Smith, vice-president of the Gillette Safety Razor Co., has been elected to the board of directors of the Lambert Company, according to Edward T. T. Williams, president.

*QUALITY* based on unceasing research . . . *PRODUCTION* under the most exacting control . . . Every *SYNTOMATIC* Product a distinctive asset in the manufacture of your perfumes and cosmetic preparations.

AROMATICS

ESSENTIAL OILS

PERFUMERS MATERIALS

SYNTOMATIC CORPORATION

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## Four Abbott Appointments

Joseph Marchand, formerly a district manager with headquarters in Montreal, Canada, has been named Canadian divisional manager, a newly created position, with headquarters in Montreal. Additional promotions in the Abbott sales organization, according to H. S. Wilkinson, director of sales, include the following: Adrian Hebert, formerly assistant manager in the Montreal district, who has been named manager of that district; along with R. F. McGrew, field manager of the hospital division, and W. W. Schulze, in charge of sales research and planning, both of whom have become assistant sales managers at North Chicago.

JOSEPH MARCHAND

ADRIAN HEBERT

R. F. McGREW

W. W. SCHULZE

## MMR To Distribute Propylene Glycol

Magnus, Mabee & Reynard, Inc. has been appointed New York distributor for propylene glycol N.F., a specialty of the Dow Chemical Co. The appointment was marked by a dinner at the Gramercy Park Hotel in New York. Leo Grant, manager of New York operations, Richard Crider, New York sales representative, B. L. Barry, and R. W. Forsythe represented Dow at the dinner, while Percy, Joseph, and Robert Magnus were among the MM&R executives in attendance.

## Armour Appointments

Harry L. Davis has been appointed sales manager, and Edward J. Hennessy, sales promotion manager, of Armour Laboratories, according to William H. Mathee, marketing director. This expansion in Armour's sales field has been made necessary by the company's development of ACTH and other pharmaceuticals of animal origin. S. P. Bradshaw contines as the manager of the bulk sales department.

## Named Pres. of Memphis Control

Charles A. Harrelson, secretary and treasurer of Plough, Inc. has been elected president of the Memphis Control of the Controllers Institute. At the annual meeting of the organization's Twin Cities Control, John V. Page, secretary and treasurer of Raymond Laboratories, Inc., was elected first vice-president. Rudolph W. Sandburg, controller of the Andrew Jergens Company, is the new vice-president of the Institute's local chapter in Cincinnati.

## Named Adv. Mgr. of B.F. Ascher

Elizabeth Bachman has been appointed advertising manager of B. F. Ascher & Company, Inc., Kansas City, where she will coordinate and supervise production of the company's advertising, and provide informative material for the sales staff.

## Nopco Completing Western Expansion

Nopco Chemical Company is completing its plans for the manufacture of industrial chemicals on the West Coast, according to Thomas A. Printon, president. The company's modern 4-year-old plant at 1141 South 14th Street is being converted to the manufacture of stearates and palmitates by Metasap Chemical Company, a wholly owned subsidiary. Equipment is now being installed and the plant is scheduled to go into production shortly after January first. The building was formerly occupied by Rare-Galen, Inc. before this subsidiary was sold by Nopco earlier in the year.

A second plant, located at 1140 South 10th Street, is being fitted for production of the extensive line of chemical processing specialties and agricultural products marketed through the company's Industrial Department. This plant was formerly devoted to Vitamin Oil processing. Complete installation of industrial equipment is expected sometime before the end of the second quarter of 1951 with production beginning shortly thereafter.

The Pacific division was established to take care of the constantly growing Metasap and Nopco business in the western most states of California, Washington, Oregon, Idaho, Montana, Arizona, Nevada, Utah, Colorado, Wyoming, New Mexico, and the Province of British Columbia. Over-all activities of the Pacific division are guided by Perc S. Brown, vice-president, assisted by Harold A. Swanson as general sales manager.

## Arner Expands Research

The Arner Co. is increasing its experimental research facilities by about 50 per cent, according to Dr. Niels C. Klendshoj, executive vice-president, in order to keep step with increased business. The expanded facilities are expected to be completed this month.

The Arner expansion program is running concurrently at the Buffalo headquarters plant and at the Fort Erie, Ont., Canada, plant where a third floor is being added to the existing two-story building.

## Sagarin Addresses Cos. Chemists

Edward Sagarin, advertising manager of Givaudan-Delawanna, Inc., delivered a talk on "Progress and Problems in the Science of Odor" at the October meeting of the Chicago Chapter of the Society of Cosmetic Chemists earlier this month.

# Methocel:

# the Ideal Binder

What makes a tablet? Whatever the ingredients, it is the binder that holds the particles together in tablet form. Throughout the drug industry, Methocel (Dow Methylcellulose) is gaining wide recognition as the ideal binder. In addition, many pharmaceutical manufacturers are using Methocel because of its value as an emulsion stabilizer, film former, thickener and suspending agent.

Many cosmetic manufacturers are also finding Methocel a more effective binder. It has been used and proved in gumless lotions, leg make-up, creams and other applications.

In both the drug and cosmetic industries, Methocel is highly useful because it is bland, physiologically inert, clean, stable in viscosity and uniform in its thickening properties.

Take this opportunity to find out about the many advantages of Methocel, a superior water soluble synthetic gum, in the drug and cosmetic industry. Send for free sample of the *new* Methocel, *powdered.*

**THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN**

THE new *methocel*

**DID YOU GET YOUR SAMPLE?**

The Dow Chemical Company
Dept. ME-946A, Midland, Michigan
Please send free sample of METHOCEL, for use in_____
Check viscosity desired: 15, 25, 100, 400, 1500, 4000 cps.
Name and Title_____
Firm_____
Address_____
City_____ State_____

DOW

CHEMICALS

INDISPENSABLE TO INDUSTRY AND AGRICULTURE

### Bymart Seeks Injunction

Bymart, Inc. has filed suit for a permanent injunction and civil damages against a Chicago company which has attempted to interfere with the introduction of Tintair, a new home hair coloring, according to Martin L. Straus II, chairman and president.

The suit was instituted in the U. S. District Court for Northern Illinois (Eastern Division) for both temporary and permanent restraining orders against Louise McMahon and Frances M. Larson, co-owners of the Tintz Company, Chicago. The suit also asks for an accounting by the court of damages inflicted upon Bymart, Inc., by certain actions of the defendants.

At the same time Mr. Straus said he had notified distributors of Tintair and the trade of the proceedings and had guaranteed to protect the distributors and to bear the costs of any suits which the defendants might bring against them. He further said that his firm initiated the legal action after learning that the defendants had sent telegrams to distributors of Tintair charging infringement of trade names. The complaint filed in Chicago denies that there is any infringement of trade-marks and further alleges that the trade-mark of the defendants is itself "incapable of functioning" as a legal trade-mark.

### Prentiss Changes Corporate Name

R. J. Prentiss & Co., Inc., 110 William Street, New York, has changed its corporate name to Prentiss Drug & Chemical Co., Inc., according to Harold R. King, president, who stated this does not involve any change in business policy, management, or personnel.

At the same time, Mr. King announced the removal of the Prentiss insecticide plant to new and larger quarters in a building adjacent to the present Prentiss chemical and botanical processing plant at 261 King Street, Brooklyn. The insecticide manufacturing division had formerly been at Newark, N. J.

### Naves Named Chevalier of Legion

Dr. Y. R. Naves, research chemist for L. Givaudan & Cie., S. A., Geneva, and officer of the pharmaceutical and chemical reserve corps of the French Navy, has been promoted to Chevalier of the Legion of Honor by a decree of the Minister of National Defense. This honor is in recognition of the most distinguished military services, particularly during the second World War.

### Catches Giant Tuna

Luis de Hoyos, Jr. landed a 457-pound Giant Tuna off Montauk, Long Island, on August 29. Using a 39 Thread Line, Mr. De Hoyos landed the fish in one hour and fifteen minutes.

### Watt Appointed by Monsanto

L. A. Watt, director of development for Monsanto Chemical Company's organic chemicals division, has been appointed special assistant to the division's general manager, according to W. G. Krummrich general manager. In his new position Mr. Watt will serve as an advisor on development matters in addition to handling special assignments.

A. T. Loeffler, general manager of the company's New York branch office, will succeed Mr. Watt. Both of these changes are scheduled to take place on January first.

### Named V.P. of Pitman-Moore

Hibbard O. Ball has been appointed executive vice-president of Pitman-Moore Company.

### New Separation Process Developed

A new process for separating various components of vegetable, marine, and animal oils by a special technique of chilling the materials in solvent to crystallize out in solid form the desired component has been developed by Texaco Development Corporation. The new process finds its first commercial application in a chemical plant now being completed near Chicago by Armour and Company. The plant, which is currently being placed in operation, will be used for the production of chemicals for deodorants, germicides, paints, cosmetics, salad oils, and textiles. Armour and Company installed and will operate the crystallizer process under a joint licensing agreement with the Texaco Development Corporation.

The new process, known as the "Fatty Oil Fractional Crystallization Process," is capable of producing fat components in practically pure form. The high purity fractions separated are the commercially important saturated and unsaturated fatty acids such as stearic, oleic, and linoleic, as well as the glycerides.

The separation of these materials is of growing importance to a wide variety of industries. This crystallization process is a valuable partner of the fractional distillation process which has long given high purity separation of the fatty components of different chain lengths. Now, a full range of high purity fatty oil components may be obtained commercially.

### Klemtner & Co. Moves Office

Paul Klemtner & Company, Inc., advertising agents and management consultants serving manufacturers of pharmaceuticals and related products, moved to 21 Central Avenue, Newark 2, N. J. in September. They will occupy the entire building.

Sharp & Dohme's new Baltimore Branch, located at 2208 Aisquith Street, which covers 26,000 square feet. W. L. O'Neill is branch manager and H. K. Mundorf is district sales manager.

## natural or synthetic

# vitamin A

## DPi specializes in both

### DPi Distilled Vitamin A Concentrate

For use in pharmaceutical or food products, old or new, there is no natural vitamin A more uniform and stable—none more effective biologically. DPi's molecularly distilled vitamin A is unexcelled among concentrates from natural materials for blandness.

Supplied in any potency you specify from 50,000 to 500,000 U.S.P. XIV units per gram, in containers ranging up to 55-gallon drums.

### Myvax 16 Synthetic Vitamin A Palmitate

For use in high-potency preparations, this product of synthetic chemistry has constant stability and biological activity comparable to that of distilled natural vitamin A esters at the same potency. Its stability in the presence of polar solvents is high, and its taste and odor are mild and pleasant.

Offered for prompt shipment in potencies of 700,000 to 800,000 U.S.P. XIV units per gram.

DPi also supplies Myvax® Synthetic Vitamin A Acetate—ideal for use in oil solution. For full information, quotations, and samples of any DPi vitamin A product write, telephone, or wire *Distillation Products Industries,* 791 Ridge Road West, Rochester 3, N. Y. (Division of Eastman Kodak Company). Sales Offices: 570 Lexington Avenue, New York 22, N. Y.; 135 South La Salle Street, Chicago 3, Ill.; Gillies & Loughlin, Los Angeles and San Francisco; Charles Albert Smith, Ltd., Montreal and Toronto.

**Here vitamin A** concentrates are carefully blended to the exact potency specifications you need—an important aspect, along with constant physical, chemical, and biological controls, of DPi's unsurpassed service to vitamin A users.

**leaders in research and production of both synthetic and natural vitamin A**

DPi

*Also...high vacuum equipment...distilled monoglycerides...more than 3300 Eastman Organic Chemicals for science and industry*

### Thompson Sues for Patent Infringement

Marvin R. Thompson, Inc. has instituted a suit against the Success Chemical Company, Inc. of 2145 Pitkin Ave., Brooklyn, for infringement of U. S. Patent No. 2,460,437, according to Marvin R. Thompson, president. Papers have been served on the Success Company, with the claim that the latter has been marketing and selling a liquid mixture of sulfadiazine and sodium lactate which constitutes an infringement of the patent.

Marvin R. Thompson, Inc. is asking an injunction to restrain future infringement and for treble damage for all products sold in the past and for unfair competition. Dr. Thompson has indicated that action is also contemplated against other firms who are producing sulfa preparations which are an imitation and infringement of the patented preparation.

### Nat'l Aniline Appoints Executives

E. Mackenzie Maxwell and D. G. Rogers were appointed president and executive vice-president respectively of the National Aniline division of Allied Chemical & Dye Corporation on October first. Both men have been with the company for many years in various executive capacities. Mr. Maxwell is succeeding B. A. Ludwig who is retiring after 53 years' service with the company and its predecessors.

E. MACKENZIE MAXWELL

D. G. ROGERS

### Drug & Chem. Ass'n Meeting

The Cincinnati Drug & Chemical Association will hold its next dinner meeting on Friday, October 27, at 6 p.m. at the University Club in Cincinnati. Dr. Paul Herget, guest speaker, and nationally known astronomer, who did extensive work in that field with the National Government during World War II, will talk on "Interesting Features of Astronomy."

New Sandoz pharmaceutical plant near East Hanover, N. J. The main building is H-shaped to give complete day-light to every portion of the structure. Laboratories for synthesis of compounds and extraction of pure principles are in a separate "chemicals building."

### Armour Moves Administrative Offices

Administrative offices of the Armour Laboratories, pharmaceutical division of Armour and Company, has moved from the Union Stock Yards to 520 N. Michigan Ave., where it has leased the entire ninth floor of the building.

### Adams Resigns from Joseph Turner

Halstead J. Adams, sales executive for Joseph Turner & Co., Ridgefield, N. J., resigned from that company October first. Mr. Adams, who has been with Turner since 1935, will announce his future plans at an early date.

### APMA Appoints 1951 Chairmen

The American Pharmaceutical Manufacturers' Association has appointed the following eastern sectional committee chairmen for 1951: General chairman, Ronald Helps, Schieffelin & Co.; guests, Robert M. Smith, Medical Economics; hotel arrangements, Dr. J. O'Neill Closs; production, E. Roth Janes, Chilcott Laboratories; programs, Dr. Closs; publicity, Bernard Jeffs, Reed & Carnrick; registration, Rudolph P. Neptun, New York Quinine & Chemical Works; marketing, R. A. Anderson, Bristol Laboratories; and scientific, Dr. John C. Bird, Lederle Laboratories division of American Cyanamid Company.

### DCAT Tournaments

In the DCAT Golf Tournament, which was held September 23, F. A. Neuberg, Enco Chemical Corp. won the DCAT Golf Trophy with 1st low net.

Recipients of the other gold prizes, according to William W. Huisking, golf chairman, were: 1st low gross, Thomas B. Singleton, the Murine Company; 2nd low gross, C. W. French, Jr., Olbury Electro-Chemical Co.; 2nd low net, R. A. Malmstrom, N. I. Malmstrom & Co.; 3rd low net, Ira Vandewater, R. W. Greeff & Co., Inc.; 4th low net, W. L. Chapman, Jr., Medical Economics; 5th low net, C. H. Slater, J. T. Baker Chemical Co.; 6th low net, Charles L. Alexander, L. Sonneborn Sons, Inc.; 7th low net, C. Arthur Larry, Nopco Chemical Co.; 8th low net, Harry Griffiths, Pennsylvania Drug Co.; 9th low net, John Nantz, National Aniline division Allied Chemical & Dye Corp.; 10th low net, Robert M. Curts, American Potash & Chemical Corp.; 11th low net, Douglas B. Stearns, Medical Economics; 12th low net, Harold F. Cummings, Vitamerican Oil Corp.; 13th low net, E. Allen Newcomb, National Wholesale Druggists' Association; 14th low net, William J. Murphy, American Potash & Chemical Corp ; 15th low net, V. E. Williams, Monsanto Chemical Co.; 16th low net, J. F. Corkill, Pacific Coast Borax Co.; 17th low net, F. L. Bodman, F. L. Bodman Inc.; nearest pin, J. V. Powers, E. Fougera & Co., Inc.; longest drive, E. G. Jacobi, R. W. Greeff & Co., Inc.; and least putts, Russel J. Fosbinder, Maltbie Laboratories Inc. and J. M. Kingston, Lederle Laboratories.

Winners among the drug industry of the miscellaneous sports competition were: putting, Chester Robinson, Hoffmann-LaRoche Inc.; archery, Murray Breese, Murray Breese Associates; Horseshoes, W. F. Schumacher, J. T. Baker Chemical Co., and Truman Fowler, Nopco Chemical Co.; and ping pong, G. S. Furman, Gane & Ingram.

*Bottles by*

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*Glass Packaging of Distinction*

FOSTER-FORBES GLASS COMPANY, MARION, INDIANA, U.S.A.

SALES OFFICES

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| KANSAS CITY | CLEVELAND | LOUISVILLE | ST. PAUL |
| DETROIT | MILWAUKEE | ST. LOUIS | NEW YORK |
| CHICAGO | CINCINNATI | ATLANTA | MEMPHIS |

HAVANA, CUBA

### Grant-Elected to Control Post

Robert L. Grant, assistant treasurer and chief accounting officer of Miles Laboratories, has been elected president of the Fort-Wayne Control of the Controllers Institute. Charles A. Harrelson, secretary and treasurer of Plough, Inc., was similarly honored by the Institute's local chapter in Memphis.

Officers recently elected include the following: Harry R. Lange, vice-president and controller of Cutter Laboratories, as vice-president of the

ROBERT L. GRANT

Controllers Institute; Hans C. Todt, assistant controller of Bristol Laboratories, Inc., first vice-president of the Institute's Syracuse Control; and J. M. Blanch, controller of Charles E. Frost & Co., as secretary of the Institute's Montreal Control. The following executives have been elected or re-elected directors of the Institute's Controls in their respective cities: Frederic M. Hadley, treasurer of Eli Lilly & Company, Indianapolis; Stuart T. Henshall, controller, Sharp & Dohme, Inc., Philadelphia; and L. Gard Wiggins, controller, the Maltine Company, director of the Newark Control.

Established in 1931, the Institute is a non-profit organization of controllers and finance officers from all lines of business, of which the total membership exceeds 3,500.

### ADMA Sections to Meet

The following sectional meetings have been arranged by the American Drug Manufacturers Association for October and November.

The legislative section will meet October 18 to 20 at the Homestead, Hot Springs, Va.; the accounting section November 6 and 7, at the Warwick Hotel, Warwick, Pa.; research and development section, November 9 and 10 at the Homestead; and the production and engineering section, November 20 and 21, Sheraton Hotel, St. Louis, Mo.

### Monsanto Appointments

William M. Russell, general branch manager of Monsanto Chemical Company's Chicago office, has been appointed general branch manager of the company's New York sales office, according to Robinson Ord, general manager of sales for Monsanto's Organic Chemicals division. Mr. Russell will be succeeded in Chicago by Forrest M. Luckett, Detroit branch manager.

These changes, which will become effective January first, follow the recent assignment of A. T. Loeffler, whom Mr. Russell succeeds as director of development for the division at its headquarters in St. Louis.

### New Sharp & Dohme Argentine Branch

The Sharp & Dohme Argentine branch has opened a new and larger branch office in Buenos Aires, according to W. B. Wimpenney, director of Export Operations. Covering 25,000 square feet, the two-story structure is more than twice as large as the former offices and is located at 1443-65 Avenida del Campo. In line with the steadily increasing demand for Sharp & Dohme products in Argentina, according to Mr. Wimpenney, the new plant is designed for easy expansion so an even larger number of Sharp & Dohme specialties can be manufactured in the South American Republic.

### Felton Opens Dallas Office

Felton Chemical Company, Inc., recently opened a new office and salesroom in Dallas, in a constructive move designed to provide its Texas and Western Louisiana customers with improved, localized service, according to Frank Brumburgh, Felton Sales manager. Herbert D. Berger, who had previously served as a Felton field representative in other areas, is in charge of the new office and will make his headquarters at 209 North Hawkins Street, Dallas, Texas.

### Millmaster Appointments

Jerome F. McGinty, secretary of Millmaster Chemical Corporation, was elected vice-president last month, following a meeting of the board of directors, according to Robert J. Milano, president.

Charles L. Westenberg, assistant treasurer, was elected treasurer; Arthur Smith, formerly treasurer, was named secretary; and John Languille, traffic manager, was appointed assistant secretary. M. J. McAllister remains as executive vice-president.

### Wheeler Named Director by CSC

Maynard C. Wheeler, vice-president in charge of production of Commercial Solvents Corporation, has been elected to the Corporation's board of directors, according to Major T. P. Walker, chairman of the board. He joined the company in 1923 as a chemical engineer, becoming manager of the Terre Haute plant in 1929, and later, production manager for all CSC plants. He was named vice-president in charge of production in 1945.

MAYNARD C. WHEELER

### St. Louis DCA Elects Officers

The Drug Chemical and Allied Trades Association of St. Louis has elected the following officers for the year 1950-51. R. Sidney Herman of the Dr. J. H. McLean Medicine Co. as president; Fred L. Thielemann, McKesson-Robbins, Inc., first vice-president; Louis J. Kirchhoff, J. B. Williams Co., second vice-president; and Fred J. Lence, Abbott Laboratories, secretary-treasurer.

Newly elected members to the board of governors are James J. Antle of Lambert Pharmacal Co., George W. Barth of Owens-Illinois Glass Co., and E. H. Lischer of the St. Louis Star-Times.

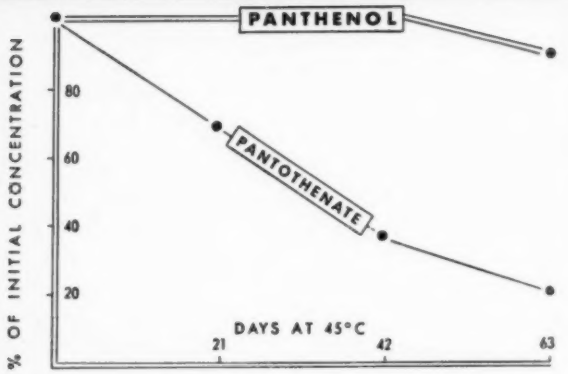
### Peters Appointed by Heyden

Dr. Franklin T. Peters, formerly of the sales department of Glyco Products Company, has been named manager of the newly established market development department of Heyden Chemical Corporation. Dr. Arthur L. Davis, transferred from the technical sales department, will be in charge of new products applications.

George H. Wiech, research department, and Ely Balgley, formerly of the Resistoflex Corporation, were also assigned to the market development department.

# PANTHENOL

## Better STABILITY in VITRO




A comparison of the relative stability of panthenol and a pantothenate in a liquid multivitamin preparation at pH4. Data from Rubin; J. Am. Pharma. Assn. (Sci. Ed.) XXXVII, 12, 1948.

"The results (in humans) show that with increasing dosage of the 2 compounds, pantothenyl alcohol (panthenol) shows increasingly superior availability when taken together with food." (1)

"These results (in rats) confirm and extend the previous findings in humans that the availability of panthenol is better than that of calcium pantothenate under conditions of ad libitum feeding, and is more nearly equal in the post-absorptive state at lower doses." (2)

## Better AVAILABILITY in VIVO


(1) Rubin, et. al.; Journal of Nutrition, 35: 499, 1948

(2) Rubin, et. al.; Federation Proceedings, 8: 1, 1949 (J. Nutrition, 40: 265, 1950)

The better physiological availability of panthenol 'Roche' gives your product another plus in the competition for physicians' recommendations.

The better stability of panthenol 'Roche' means lower costs due to the need for lower manufacturing excesses.

All panthenol 'Roche' is packed in seamless aluminum bottles.

Now is the time to get all the facts about panthenol 'Roche'. Call or write the 'Roche' Vitamin Division.

**VITAMIN DIVISION**
**HOFFMANN-LA ROCHE INC.**
NUTLEY 10, NEW JERSEY
NUtley 2-5000

In Canada:
Hoffmann-La Roche, Ltd., Montreal, Que.

### Doug Edwards Addresses CIBS

Douglas Edwards, noted news commentator of radio and television, was the guest speaker at the September luncheon of the Cosmetic Industry Buyers and Suppliers Association. He delivered an interesting talk on his experiences as a news analyst.

Ray McCue (right) of Albert Verley, and CIBS Entertainment Chairman, introducing Douglas Edwards, news commentator, at last month's meeting.

### Gane's Chem. Wks. Forms Sales Office

Gane's Chemical Works, Inc. has opened new executive and sales offices at 677 Fifth Ave., New York. The company has established its own sales division under the direction of Phillips B. Marsden, who was formerly connected with Thos. Leeming & Co. and more recently manager of Commercial Solvents Corporation pharmaceutical division. Research and manufacturing divisions remain at Carlstadt, N. J.

### Schering Holds Banquet

Schering Corporation recently held a banquet in honor of physicians and official representatives from eight Latin-American countries who were attending the Fourth International Congress of Gynecology and Obstetrics in New York. Dr. Francis C. Brown, president of Schering, reviewed briefly the advance achieved through the close cooperation between research workers and the pharmaceutical industry concerned with hormones.

### Enlarges Research Staff

Dr. Gerald C. M. Harris, formerly a mycologist in the Dyestuffs division of I.C.I. Ltd. in England, and Theodore H. Elferdink, Jr., have joined Commercial Solvents Corporation as microbiologists. Dr. Bernard L. Lubin, formerly in the Calco Chemical Division of the American Cyanamid Company, has also joined the corporation research staff, as a chemical engineer.

### Sacerdote Studying Amer. Market

Giuseppe Sacerdote, representative of the Italian Government, and delegate of the Italian Chamber of Commerce and the Italian Unione Industriale, is now in the United States as a guest of the Collins Chemical Co., Inc. He is investigating the possibilities of introducing to the American market Italian natural essential oils in the manufacture of foodstuffs. Mr. Sacerdote plans to continue his investigations in Canada as a guest of the Collins Canadian Chemical Company in Montreal.

GIUSEPPE SACERDOTE

### Dr. Linnell Addresses SKF Staff

Dr. Wilfred H. Linnell, professor of Pharmaceutical Chemistry of the University of London, recently addressed the research staff of Smith, Kline & French Laboratories, during a four-week visit to America. Dr. Linnell spoke on two subjects, "Pharmaceutical Education in England" and "Chemotherapeutic Studies at London School of Pharmacy."

### Stark Heads Pharmaceutical Dept.

Harry O. Stark became manager of the Chicago office of the Pharmaceutical Department Calco Chemical Division, American Cyanamid Company, on October first. This office is temporarily located with the Pigment Department, at 228 North La Salle Street, but next spring will be moved to the new building which American Cyanamid is erecting for all of its departments in Chicago.

### Named to U.S.P. Committee

Professors Lloyd M. Parks and Melvin W. Green of the University of Wisconsin School of Pharmacy have been named to committees that will supervise the scientific program to establish official standards for drugs in the next revision of the U. S. Pharmacopoeia.

### Barker Appointed Supervisor

M. Stanley Barker, assistant vice-president of Magnus, Mabee & Reynard, Inc., has been appointed Field Sales Supervisor for Metropolitan New York, New Jersey and Connecticut. He had formerly been senior sales representative in the east for Magnus.

M. STANLEY BARKER

### Toni Offers New Neutralizer

Permafix, a new neutralizer, was introduced last month by the Toni Company, according to R. N. W. Harris, president, who declared that it is faster and more thorough than old-type neutralizers. According to Mr. Harris, Permafix offers the added advantage of conditioning the hair in the manner of a creme rinse and at the same time performs the basic function of making the wave permanent.

### Appointed to Sterling Export Posts

William J. Dechert and Nelson H. Zeigler have been appointed vice-presidents of the Sydney Ross Co., while George V. Harley has been appointed vice-president of Sterling Products International, Inc. (Delaware), and Anton D. Reiners, vice-president of Sterling Products International, Inc. (New Jersey), according to David M. Corcoran, president of these subsidiaries of Sterling Drug Inc.

### Appointed by Schenley Labs.

Dr. John M. Shaul and Dr. William M. Sexton have been appointed associate medical director and director of clinical investigation, respectively, for Schenley Laboratories Inc., according to Dr. Charles E. Dutchess, medical director of the company. Dr. Shaul had formerly been associate director of medical research for Winthrop-Stearns, medical director of the Nepera Chemical Company, and medical director of the Maltbie Laboratories.

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**Throughout the pharmaceutical and industrial chemical fields, Heyden Salicylates have always been accepted as standards of purity and uniformity. Available in various forms—powder, crystals or granular—these high quality Salicylates are shipped to you exactly when and where you need them.**

**SODIUM SALICYLATE U.S.P.**
*Large Crystals, Flo Crystals or Powder*

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*Crystals or powder*

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*(Oil of Wintergreen, synthetic)*

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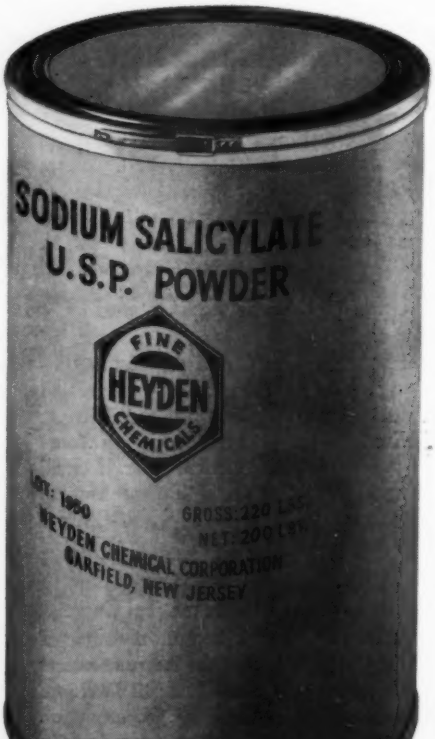
*(Salol) Granular or powder*




**AMMONIUM SALICYLATE N.F.**
*Crystals*

**CALCIUM SALICYLATE**
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**STRONTIUM SALICYLATE N.F.**
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**SHIPPED IN FIBER DRUMS FROM 25 TO 225 LBS. NET**

**Samples and further information available upon request on company letterhead.**

*Serving Industry*
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Benzaldehyde • Benzoates • Benzyl Chloride • Bromides Chlorinated Aromatics • Creosotes • Formaldehyde • Formic Acid • Glycerophosphates • Guaiacols • Hexamethylenetetramine Medicinal Colloids • Methylene Disalicylic Acid • Paraformaldehyde • Parahydroxybenzoates • Penicillin • Pentaerythritols Propyl Gallate • Quadrafos • Salicylates • Salicylic Acid Streptomycin

### Brown Named Pres. of Products Div.

Robert B. Brown, vice-president of Bristol-Myers Company, has been made president of Bristol-Myers Products division, according to Lee H. Bristol, president. Mr. Brown joined Bristol-Myers Company in 1936 as advertising manager and subsequently served as advertising director, and more recently, in a general management capacity.

ROBERT B. BROWN

### Russo Honored by Lueders

Joseph Russo of George Lueders & Co. was welcomed into the company's Veteran's Organization last month as the forty-fifth member. He was tendered a luncheon at the Drug and Chemical Club and received a number of gifts from the company and the employees.

### Givaudan Expands Los Angeles Office

The Los Angeles office of Givaudan-Delawanna, under the management of Ben Cottle, opened its new and expanded quarters the first of this month at 8750 Alden Drive. Mr. Cottle, West Coast sales representative of Givaudan and Sindar Corporation, is assisted by Edwin Kung, sales representative, and Mrs. Elizabeth Morgan of the office staff.

### To Increase Penicillin Output

Bristol Laboratories, Inc. has begun a $2,000,000 expansion program in its penicillin output. Two buildings at the Syracuse plant will be enlarged and new equipment will be installed. This expansion will permit the company to meet increased military demands without cutting back civilian supplies.

### Lederle Awards $7,500 Grant

Lederle Laboratories have awarded a grant of $7,500 to the University of Illinois College of Medicine in support of a research investigation in infectious diseases, preventive medicine, and related fields. The study is being undertaken under the supervision of Dr. Harry F. Dowling.

### Cosmetic Chemists to Meet

The Society of Cosmetic Chemists will meet on Tuesday, December 5 in the Biltmore Hotel, when several scientific papers in the cosmetics and toilet articles field will be delivered. W. E. Graham, research director of Crown Can Company, will present a paper on pressure packaging of cosmetic products. Two papers will be read on the subject of hair, "A Quantitative Method for the Evaluation and Study of Shampoos," by G. Barnett and Dr. D. H. Powers of Richard Hudnut, and "Swelling Studies on Single Hair Fibers," by Milton Eckstrom of Raymond Laboratories.

Dr. Philip Jay of the University of Michigan School of Dentistry will discuss the relation of salivary actobacillus counts to dental caries activity. Dr. Arthur R. Cade, Sindar Corporation, will deliver a paper on "A Method for testing the Degerming Efficiency of Hexachlorophene Soaps," while patch testing techniques and evaluation of patch test results will be discussed by Dr. Herman A. Shelanski, Industrial Toxicology Laboratories.

Gertrude Schutze, librarian of Bristol-Myers Company, will present a paper on the subject of the current literature sources for the cosmetic industry.

### Brown Promoted by Sharp & Dohme

William W. Brown, assistant chief engineer, Sharp & Dohme, Inc., has been appointed chief design engineer, according to J. M. Waligora, chief engineer. He will supervise and direct the design and preparation of plans and specifications for equipment and facilities needed by the company in its plants at Philadelphia, Glenolden and West Point, Pennsylvania. Mr. Brown succeeds Robert H. Baxter who was recently appointed head of the Industrial engineering group, a new department created by an expansion of Sharp & Dohme's engineering operation.

### Elected V.P. of Production

Dr. Max Luthy was elected vice-president in charge of production and research of the Givaudan Corporation and subsidiary organizations at a regular meeting of its board of directors last month. The associated and subsidiary companies include Givaudan-Delawanna, Inc., Givaudan Flavors Inc., and Sindar Corporation. Dr. Luthy joined the Givaudan organization in 1930 and has been a member of the board of directors since 1945.

### Rivinus Heads SKF International

F. M. Rivinus Jr. was elected president of Smith, Kline & French International Co. and Smith, Kline & French Inter-American Corp. at a directors' meeting last month. He had formerly been executive vice-president of the firms. Kurt A. Solmssen, vice-president of the foreign subsidiaries, was named a director at the same meeting.

F. M. RIVINUS, JR.

### Bush Sails for France

Burton T. Bush, consultant for the Bush Aromatics division of the Dow Chemical Co., sailed for France on October 14 to consult with Herbert Fraysse, president of the House of Synarome. While in France, Mr. Bush will investigate matters now pending with the Bush Aromatics division and make market studies for the essential and aromatic chemical industry.

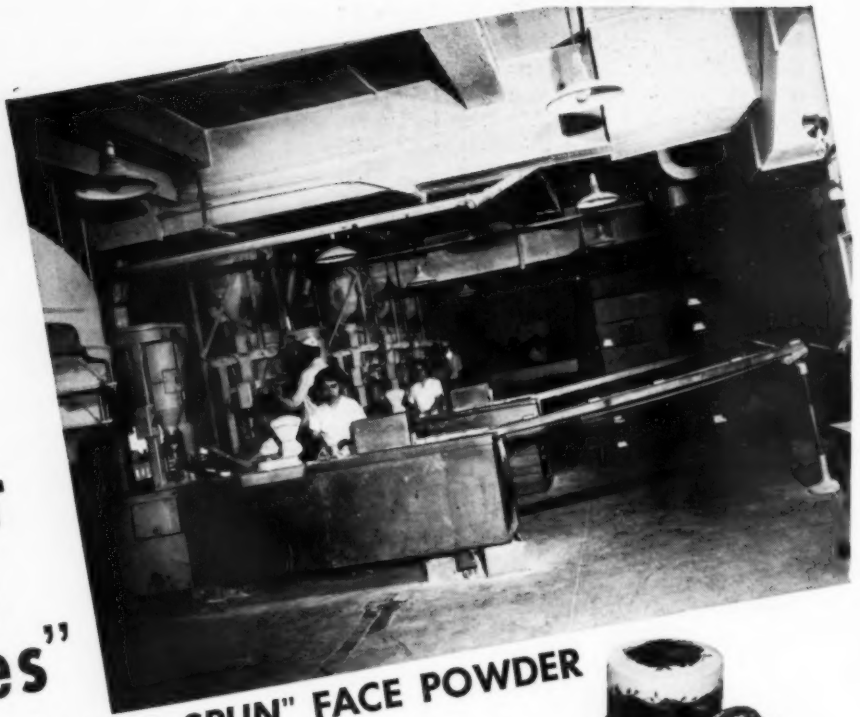
### Bristol Military Plan for Employees

All employees of Bristol-Myers Products division, Bristol Laboratories Inc., Sun Tube Corporation, and Rubberset Company, who enter military service, will be covered by the company's Military Service and Veteran Reinstatement Policies, according to S. C. Chatfield, director of Personnel.

Under the plan the employees will be paid a total of twelve weeks' salary during the first year of service, weekly payments to be made the first week of each month. Bristol Myers Company will maintain for each employee, during each year of military service, under the National Service Life Insurance, an amount of life insurance equalling and replacing that maintained under company group life insurance.

Veterans will get their jobs back at the rate of pay current at the time of reinstatement and all payments under the Retirement Income Plan, including employee and company contributions, will be made up by the company.

# "filled by S&S Rotary Powder Filling Machines"



Coty "AIR-SPUN" FACE POWDER

S & S Rotary Powder Filling Machine

These distinctive and most famous cosmetic packages of face powder by Coty were filled on S & S Rotary Powder Filling Machines. Requiring but one operator per machine, the container to be filled is placed on a rotary plate which carries the container to the filling auger. The container is then automatically filled . . . gently and without pressure. The filled container is then carried away on an outgoing conveyor, ready for sealing. Production is approximately 40 to 50 cosmetic packages per minute.

**20,000 PACKAGES IN EIGHT HOURS POSSIBLE ON S&S ROTARY FILLER**

Small cans or canisters, face powder drums, with a maximum width or diameter of 3", and as small as 1"—from ¼" to 2¾" in height—can be speedily filled with complete accuracy. The S & S Rotary Filler is dust-free in operation, and assures a cleaner and healthier filling room . . . Submit your sample filled package, or packages, for a definite guarantee of speed —no obligation whatsoever.

The S & S Filler is an efficient packaging machine for your products. For greater production, purchase 1, 2 or 4 station units. Complete details on request.

**STOKES & SMITH Co**

PACKAGING MACHINERY — PAPER BOX MACHINERY

*Subsidiary of Food Machinery and Chemical Corporation*

**4912 Summerdale Avenue**
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Exclusive West Coast Distributor:
Anderson-Barngrover Division of FMC
San Jose 5, California

# MANAGEMENT FORUM

*By Francis Chilson*
*Industrial Consultant*

### The Nose Shows

If I had the job of recruiting a hard hitting sales force I'd select men with curved noses. I don't mean the big, hooked Hittite nose; I mean a nose with only a slight curve in it. Don't ask me to explain the connection between a "sales-curved" nose and sales ability. I don't know if there is any actually, but I do know that almost without exception superlatively good salesmen and salesmanagers, have a sales curve in their noses. And I know a lot of top flight sales people. Now before you say I'm nuts, stop and think of the best sales people you know. If you are a good observer you'll recall what their noses look like. I'll bet the majority of them have curved noses—and no connection is here implied between nose construction and race. I have observed the same "sales nose" in men of almost every racial background. Included among sales people are a considerable number of company presidents of course, so many of whom came to their present positions through the sales force. Although I have reflected casually from time to time that there might be a basis for my observation, I felt really that the connection between a curved nose and the ability to smell out a sale was purely accidental. But just the other day it was brought sharply into focus again by a publisher's bulletin describing some new sales training manuals. It was illustrated by photographs of the authors. Without exception every one had a sales-curve nose!

### Rivalry Within Unity

This should be the slogan of every business organization. Rivalry within unity. Nothing spurs executives like superior performance by other executives in their own class. When rivalry without unity exists you have a devil's brew of rotten politics. You have seen the effects of rivalry without unity in the army, navy and air force, each of which would gladly hamstring the others and the price is being paid on the battle fields of Korea today.

### Bull Chits

To all of you who are cost accounting minded I'll be glad to send you a copy of my new cost summary known as a Bull Chit which provides a means of computing the cost of conferences and committee meetings in which executives so often waste so much time and exhaust so much energy in the form of hot air. I sit in an endless number of meetings in which a vast amount of time is wasted by very expensive people. If the salaries of these people could be apportioned to the conferences they attend—and a lot of them do damned little else—it would be discovered that some of the conferences have cost the company more than the subjects under discussion. Hence the Bull Chit, which provides in summary form the names and salary rates (reduced to an hourly basis plus overhead of course) of the individuals attending the meeting. Thus can the cost of meetings be computed. Since cost minded officials insist on cost finding in every department why not in their own?

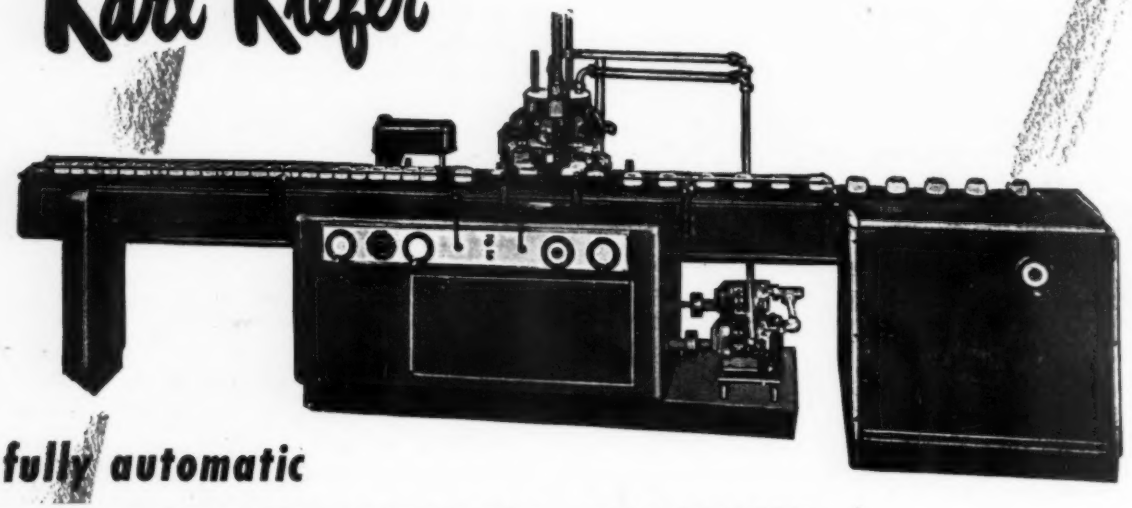
When the industrial history of this period is written it will be known as the Age of the Conference. Ever since some stinker invented committee management we have become committed to an endless amount of discussion, mostly about triviata, which any good executive could and should handle without reference to anybody else.

As business becomes larger, more extensive and more complex, it requires direction by able, responsible men and you will hear and read an endless amount of discussion about the universal need for men capable of assuming responsibility. Yet everything possible is done to stifle that sense of responsibility by a form of management which requires that no executive initiate action or make financial commitments

gives a fresh and definite approval to...

# PRODUCTION COSTS

## Karl Kiefer



fully automatic

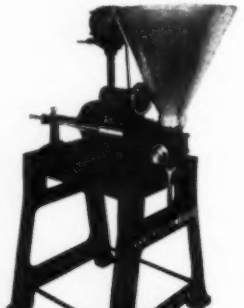
## VARI-VISCO FILLING MACHINE

**Results talk—clearly and distinctly—when this time-tried super performer is busy on the job, neatly, accurately, steadily filling facial creams, salves, lotions, and the like. Day after day it pays its way by returning handsome dividends on your investment!**

**Engineered to save time—labor—money—through higher speed and a perfect fill. Selection of filling volume and production rate is accomplished by the turn of 2 handwheels.**

**Improve Your Competitive Position—Now—Be a Leader!**

**Ideal for filling those attractive Polyethylene containers.**



## KIEFER MONO-PISTON FILLING MACHINE

As practical as it is precise. A smooth performer all the time. 80 to 125 dozen jars an hour. Always ready for work.

## The Karl Kiefer Machine Co.

**CINCINNATI, U. S. A.**

NEW YORK—SAN FRANCISCO—BALTIMORE—CHICAGO—BOSTON—LOS ANGELES—SAVANNAH—SEATTLE—PORTLAND—LONDON, ENGLAND

**Completely automatic, semi-automatic, hand-fed equipment to clean, fill, close, convey jars, bottles, tins, collapsible tubes.**

●

**Filters** **Pumps**

without discussing and obtaining approval of his projects at some form of meeting.

I have a good friend who continually preaches to his divisional heads that they must make decisions, assume full responsibility for their own divisions. He insists that they act always on their own initiative. But he inevitably concludes whenever anything is discussed with him. "Before you go ahead with this, let's discuss it further." And God help anybody who goes ahead without discussing his projects with the Boss!

Not long ago I sat through a very long discussion about the need to purchase a piece of research equipment. The amount involved was not very large. But this particular company has a policy which prevents a financial commitment by any executive in amounts in excess of $500. Hence the expenditure could not be made until damn nearly every executive in the place had had his say. Actually only three people in the meeting knew anything about the piece of apparatus anyway. Mentally I computed that if the cost of all the time of the men attending the meeting was tabulated it would have been discovered that the meeting had cost more than the apparatus in question. Hence the need for Bull Chits.

It seems to me that if a research director cannot be entrusted with the responsibility of making capital expenditures within an annual capital allotment set aside for research purposes, he should be replaced. I don't see how we can develop responsible executives without giving them full authority to make capital expenditures for their divisions within an annual budget without requiring them to submit individual requests in detail to some kind of discussion group.

The same thinking applies to plant managers and all other divisional heads as well. Either they have the ability to spend the funds allotted to them wisely or they haven't and if they haven't the sooner you find that out the better for your company.

I have observed almost without exception that the individual making a financial request for his division sooner or later gets it, but the hell of it is that invariably it is later. All that is accomplished in the end by a lot of discussion is to hold up action and to stultify the feeling of pride and responsibility possessed by all able men. Too much discussion also serves to promote bitter politics within the organization, especially when one department head, capable of making an unusually persuasive presentation, has his project approved while another is turned down or forced to wait for further discussion at subsequent meetings.

Some companies are not financially sound and they spend more time worrying about the dollars that go out than they do earning those that come in. Other firms have had such a long hard row to hoe to achieve financial soundness that it leaves a mark upon them which is not forgotten and they continue to treat every dollar spent as if it were their last one. They add to the cost of every project by talking too long about it. Bull Chits would help them realize that time is money and talk is costly.

### Plant Managers as Salesmen

I think it is a very good thing for plant managers to have had some sales experience. I know of one company in the trade, which as a matter of policy, takes its plant managers out of the sales force. They disregard technical training, feeling that the lack of it in the plant manager can be supplied by adequate technical supporting staff. I think this is a very good thing. Sales people have a sense of the importance of timing; they have a sense of urgency; they are flexible and hence can swiftly change tactics to suit particular situations. Too many plant managers are inflexible—too routinized. They want everything to conform to a set schedule. They resent having to change schedules. They like set routines.

To have a long range schedule is ideal from a production standpoint. With it plant managers can provide for material, equipment and men well in advance of requirement dates. In some plants such arrangements are possible because few products are produced, and those in large quantities. But the norm in the drug and cosmetic industry is changed and the rate of change is accelerating through the introduction of better research products by competing firms. It is a wise plant manager who realizes that he is part of the sales force too. He realizes the importance of prompt deliveries. He realizes the importance of competitive costs. He realizes the importance of timing. The latter is vital. Time after time salesmanagers have bitterly complained to me when competitors beat them to the market with new products, because their plant managers were operating on the basis of "business as usual" and they'd be damned if they'd have schedules upset just because "that screwball sales manager" was clamoring for impossible delivery dates.

Sometimes those "impossible" dates are not as impossible as they seem. No plant manager should ever forget that the salesmanager is the guy responsible for earning the money to operate the plant—among other things.

In fairness it must be admitted that the fault lies not in one direction only. Some salesmanagers are screwballs. They can sell goods but they fail to realize that behind delivery there must be organization and organized, cooperative effort. Not long ago I listened to a salesmanager screaming his head off at a plant manager because the latter had caused him to miss the market by failing to make deliveries on time. In the end it turned out to be the salesmanager's fault because he'd gone off on a vacation and had failed to approve copy for the printed matter. But as I told the plant manager later, he was not wholly blameless because he should have known that the printed matter was lacking and should have raised hell to get the copy approved even if he had to interrupt the salemanager's vacation.

The most common fault of sales managers is their reluctance to make any kind of forecasts, not alone with respect to new products, but old ones as well.

On old products the plant manager can, if he has to, follow previous sales records and carefully watch the movement of current shipments in order to increase or decrease schedules. But on new products he should not be expected to guess at market requirements. Yet often he must. And I've known many cases where the plant manager didn't even know a new item had been added to the line until orders began to come in for it. I've known sales managers to initiate special sales and deals without letting the plant manager know anything about them. These things of course indicate bad organization and too much departmentalized thinking.

### Still Bulletin

The F. J. Stokes Machine Company, Philadelphia, Pa., announces a new 16-page catalog on "Stokes Automatic Water Stills."

The catalog describes Stokes water stills for laboratory and industrial use from ½ to 100 gallons per hour capacity.

Special features of the catalog include a schematic drawing showing operation of a still and a detailed listing of applications.

The new catalog and data book will be sent on request by writing to F. J. Stokes Machine Company, 5900 Tabor Road, Philadelphia, Pa.

### Water Problems

The industrial water engineering services offered in the fields of water procurement, treatment, usage and disposal by Hall Laboratories, Inc., Pittsburgh, are described in a new booklet, "Let's Consider Your Whole Water Problem," just issued by this consulting firm. Organization of the Hall technical staff, comprising engineering specialists in water problems and in various processes in which water is employed, research and analytical units, and field service engineers, is described and diagrammed. Typical service problems are discussed, with illustrations showing flow schemes of water in process and disposal.

*The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.*

### Acid Pump

Safe and convenient transfer of acids and other liquids from stainless steel containers is now possible with the GS No. 17 pump. Liquids flow smoothly and stop instantly. They come in contact only with the corrosion-resistant tube.

The GS No. 17 pump is fitted with a safety valve for air line pressure and a hold down clamp to secure the pump into the container, together with 25 feet ⅜" air hose with male or female coupling and chuck attached. Price—$27.56 complete.

Lead tubes are suitable for sulphuric, Hydrochloric, Hydrofluoric acids and many others. Saran plastic tubes are recommended where the pump is to be used in Nitric, Muriatic, Citric, Phosphoric, Acetic, Bleaches, Peroxide and others.

These safe pumps are essential wherever acids and corrosive liquids are handled . . . in industry, laboratory, plating-room, battery manufacturers. Nationally known chemical manufacturers as well as many specialty establishments find them an inexpensive must for safety. Order direct or send for descriptive literature. General Scientific Equipment Co., 2700 W. Huntingdon Street, Philadelphia 52, Pa.

### Liftomatic

Marvel Industries, Skokie, Illinois are introducing an entirely new truck, the "Liftomatic," for handling drums, fibre or steel, or any container with a bead, rim, or chime, regardless of size of rim.

It is unique in that the drum is held and carried by two jaws which close on the upper rim, there being absolutely nothing—prongs, platform, or other support

underneath the container. For this reason, it is ideal for handling fibre drums, there being no danger of injuring the bottom.

The jaws *close* and *open automatically* on the rim without any damage to drum or bead, effecting pick-up or release.

The jaw housing is quickly and easily adjustable *anywhere* on the mainpost, allowing containers from 7 to 44 inches in height to be transported.

Because the outside dimensions of the wheel base is less than the diameter of the average drum, the operator can place the drum in any exact location without any manual handling. The drum likewise can be placed in or removed from the center of a line of drums without moving adjacent drums.

Though built of steel to take the heaviest loads up to 1000 lbs. it is light, weighing only 40 lbs.

It is of welded construction, and is furnished with full roller bearing wheels, mounted with 10 x 2.50 solid rubber tires, or 8 x 2.50 cushion tires, if desired.

It has been extensively tested and successfully used by many large concerns in the oil, chemical, paint, plastics, candy, food processing, and small metals parts manufacturing fields.

### New 3-Way-Valve

Positive (flow) regulation of processing tanks' contents from just one point of control is provided by the Langsenkamp 3-Way-Valve, the only 3-Way-Valve with a 2 part plug type key. The 3-Way-Valves' highly efficient operation eliminates guesswork, human errors, and other control problems frequently experienced with conventional 3 part key type valves.

Action starts with movement of control to desired position indicated on valve control quadrant. Handles are then locked in place, effecting complete and positive seal up to 60 lb. working pressure. Plug remains secure until handles are unlocked and control reset at new position. No chance of losing contents down the sewer.

Langsenkamp 3-Way-Valve is especially effective for use on batch tanks necessitating fresh wash after each processing operation is completed. Requires no lubrication.

Usually fabricated in pure nickel, nickel alloy or stainless steel, valves can be obtained in any desired metal. Available in 2½", 3" and 4" I.P.S. sizes or with sanitary threads.

For complete information write F. H. Langsenkamp Co., 227-235 Last South Street, Indianapolis, Indiana.

### Midget Mill

Stainless steel construction, making it particularly adapted to precise laboratory work which permits no contamination, has been incorporated in the Model M "midget" processing mill, according to Morehouse Industries of Los Angeles, manufacturers of Speedline equipment for the processing of drugs, cosmetics, inks, foods, chemicals, plastics and many other materials. The mill has been designated Model MS. It is constructed entirely of stainless steel. It is also adapted to the grinding and processing of certain anhydrous chemicals and earth materials.

Accessibility of processing chambers and moving parts for quick, thorough cleaning make possible rapid changeover from one material to another. Easier cleanup and changeover make the mill especially valuable on short experimental runs and in laboratory control work.

Model MS has a capacity of 8 to 20 gallons or more per hour, depending upon the viscosity of the material to be processed, varying from water-thin to heavy paste consistency.

Diameter of the mill is only 14" and height is slightly more than 3 feet including filling funnel. Freedom from vibration, light weight and ease of installation also add to its adaptability for laboratory and small quantity work. No special foundation is required. Power outlets and connections for water or steam for cooling or heating are all that is necessary for immediate use.

The mill, equipped with a 3 H.P. or 5 H.P. motor, can be supplied with either open-type or explosion-proof motor, if required.

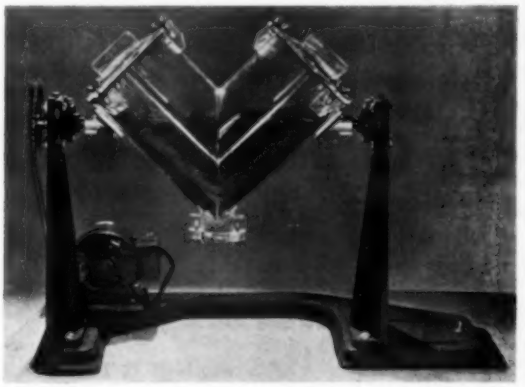
The Morehouse grinding principle, perfected after many years of manufacturing specialized equipment for grinding, homogenizing, disintegrating and dispersing, employs a stationary or stator stone and a rotor stone revolving at high speed through which the material to be processed is fed. The Model MS gives positive adjustment of the grinding stones to within 1/1000 of an inch. Adjustments can be quickly and exactly duplicated.

The grinding stones used in Morehouse Speedline mills have been specially developed for the exclusive use of Morehouse Industries by the Carborundum Company and are sold under the trade-mark Carborundum.

Complete details on the Model MS and other mills constructed for a wide variety of products may be obtained by writing Morehouse Industries, 1156 San Fernando Road, Los Angeles 65, California.

### Twin Shell Blender

The Patterson-Kelley Co., Inc., 23 Hurson Street, East Stroudsburg, Pa. announces the addition to its line of production Twin Shell Blenders a transparent laboratory or pilot plant unit for test or small production service. Results as to efficiency of blending, timing and capacities are comparable with results to be expected



from production units. Two sizes are available—4 and 8 quarts capacity—mounted on an adjustable cast aluminum base which has an extendible frame, thus permitting interchange of two sizes on the same frame. Extra blender shells are available for use where danger of contamination would necessitate fresh blenders each time.

The Blender Shell is made of a heavy transparent plastic, thus combining ample strength with visibility Other materials of construction for the shell are available. The dust-tight charge and discharge connections have covers pivoted on one side for quick opening and closing.

The assembly includes a 1/20 hp GE-gearhead type motor, high power factor, split phase, 120 volt AC for 50 or 60 cycles—sealed ball bearings—chain and sprocket drive to produce 32 rpm. Prices (F.O.B. East Stroudsburg) are $149 for the 4 qt. Blender and $159 for the 8 qt. size. Literature available on request.

# in ION-EXCHANGE it's RESULTS that count!

## Check... THESE CASE HISTORIES OF DORRCO d-i INSTALLATIONS . . .

**FOR ANODIZING BATHS**

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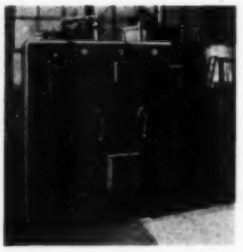

**FOR CARBONATED BEVERAGES**

A Dorrco D-I Unit, four years old, still operates exactly as specified when sold . . . and with original resins.

**Results:** Taste and "shelf-life" of finished product improved . . . pin-point carbonation attained. Overall operating cost – two-tenths of a cent per case of twelve 28-oz. bottles!

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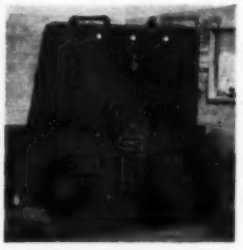
Dorrco D-I Unit installed over 3 years ago . . . no resin replacements required.

**Results:** D-I water cut costs when substituted for distilled water . . . process variable eliminated when substituted for raw water. Total operating expense – 13 cents per thousand gallons of de-ionized water produced!



**FOR PHARMACEUTICAL MANUFACTURE**

D-I water meets strict operating requirements over a four year period . . . with no resin replacements.

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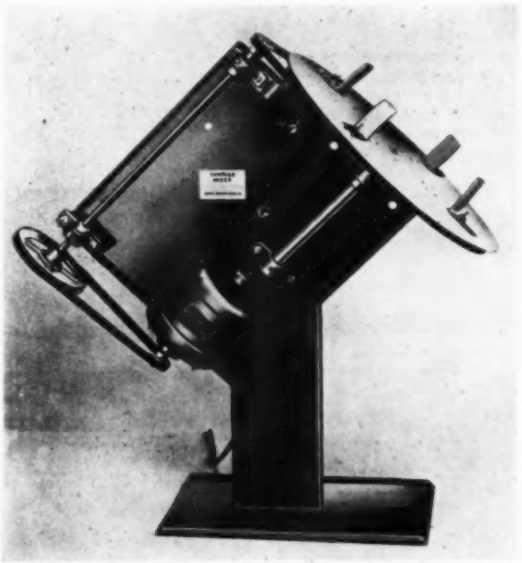
### Portable Tumbler-Mixer

A new, low cost, portable universal Tumbler-Mixer that will tumble or mix anything, has just been placed on the market by the Rampe Manufacturing Co., Cleveland 15, Ohio.

This machine, which can quickly be moved from one job to another, tilts through a full 90° arc so that the work can be tumbled at the best angle.

The Tumbler-Mixer is adapted to many uses due to the adjustable turn table clamps that allow standard and odd shaped containers to be used. Easy to hold a 5-gallon pail, wooden box, can jug, stone ball mill, laboratory beaker or any other shaped container. Regular octagonal tumbling barrels of steel or non-metallic materials furnished as extra equipment.

Ideal for small lots in large or small shops, experimental departments, laboratories, chemical plants, etc.



Can also be used to mix paints and add colors to plastic granules.

Specifications include anti-friction bearings throughout, 1/6 H.P. motor, 19″ turn table. Floor space required 19″ x 32″. 35″ high. Weight 80 pounds.

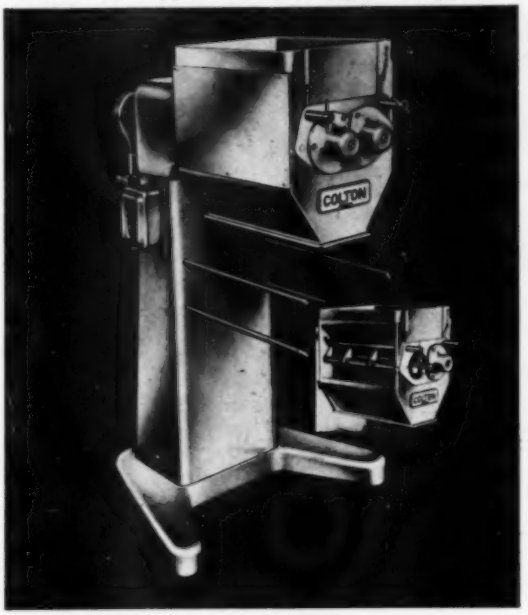
### Rotary Granulator

A new unit which employs a new principle for granulating and sifting dry and semi-wet materials is announced by Arthur Colton Company, Detroit.

Known as the No. 44 Twin Rotary Granulator and Sifter, the new unit is equipped with twin rotors of the hexagonal bar type which rotate continuously in opposite directions. This design and operating action permits the use of double the screen area normally available in oscillating type granulators and results in about two and a half times as much production. It also produces a uniform speed operation with none of the lost motion inherent in oscillating types. The drive mechanism is simplified by eliminating such parts as the crank connecting rod and gear sector.

Tray rods are placed at two levels, permitting the changing of trays without stopping the machine. The base design permits the use of large containers such as drums. Bags can be attached to the hopper through the use of an optional flange attachment.

Carbon steel screens are furnished as standard. Special screens are available on order. Also available are stainless steel hopper and contact parts, hopper cover,




casters, starting switch and wiring.

The entire machine is very accessible. Rotors are removable through an opening in the front of the hopper and hopper side panels are removable for quick and easy screen changing. Drive mechanism is dustproofed.

### Drying Jar

The Bethlehem Apparatus Co., Hellertown, Pa. announces a new apparatus for drying, storing and filing samples and specimens in industrial and scientific laboratories, and for hospitals, museums and other institutions which may need to preserve materials in a dry atmosphere. It is expected that the device will be useful to research workers, technicians and laboratory assistants in the metallurgical, chemical, biological, physiological and geological fields.

Known as the Bethlehem Dri-Jar, the apparatus consists of a widemouthed glass jar 3″ in diameter and 7″ high, with a screw lid. Rigidly suspended from the lid is a series of four metal storage shelves. Material can be placed on the shelves uncovered, or can be boxed, or otherwise separated, tabulated and marked for easy identification and reference. Each specimen can be seen through the glass and each is available separately without disturbing the others.

On the bottom of the Dri-Jar there is space for moisture-absorptive chemicals or other dessicating material. This material is not in contact with the specimens, and can be removed without unpacking the contents.

These new jars permit the storage, classification and preservation of thousands of items in the limited space of several laboratory shelves or cabinets.

*(Continued on page 572)*

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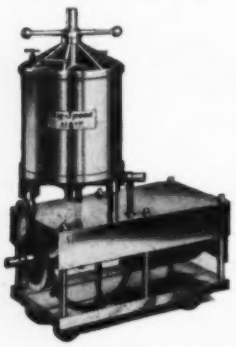

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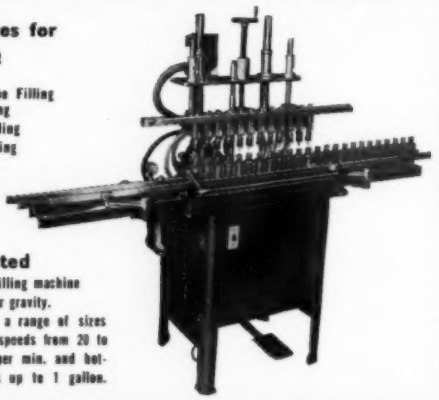

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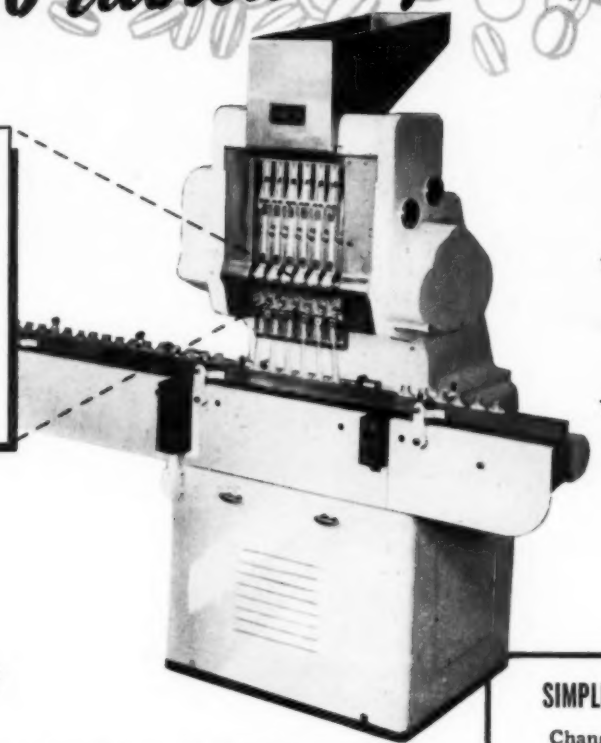

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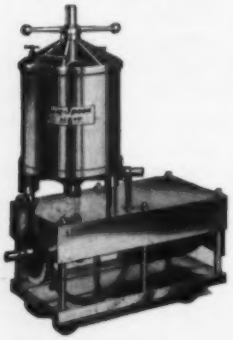

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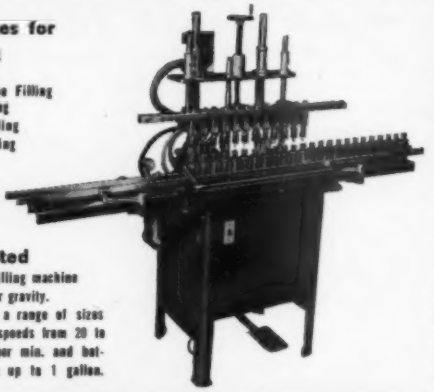

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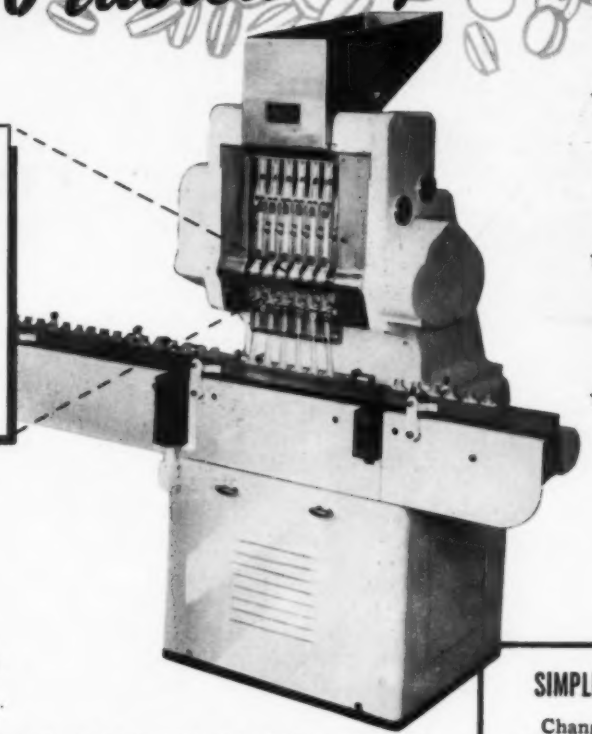

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# PATENT THOUGHTS AND TRENDS

*by Thomas Cifelli, Jr., Patent Attorney**

### Co-patentee Demands Share in Streptomycin Royalties

A court action which is bound to be of more than passing interest to many persons other than the parties directly involved was recently started against the well-known Prof. Selman A. Waksman and the Rutgers Research and Endowment Foundation. The plaintiff, Albert Schatz, a former graduate student of Rutgers, seeks among other things a share in the more than $2,600,000 alleged to have been received by the foundation as of around September 1, 1950.

Believing that the readers of this department will wish to follow developments in this important case, a review of the streptomycin patent, as well as of the actual court papers has been made, and a summary of the present situation as far as it is publicly known is given below.

### Background of Invention

It appears that while Schatz was working for his master's degree at Rutgers he was one of a number of Prof. Waksman's students or assistants. As a result of the work done during this period streptomycin was produced. According to Schatz, he was requested to join with Prof. Waksman in filing a patent application in order to prevent anyone from obtaining a monopoly on streptomycin.

In 1948 Schatz and Waksman jointly obtained U. S. patent No. 2,449,866, covering streptomycin and a method of making it. This patent was considered in detail in the November, 1948 issue of This Journal on page 656. It was there pointed out that the three examples given in the patent terminate in aqueous solutions containing streptomycin and that the only product claim reads: steptomycin.

The Waksman-Schatz patent was assigned by the co-patentees to the Rutgers Research and Endowment Foundation.

As far as is publicly known, all was well until the Spring of 1950, when Schatz brought suit in a New Jersey State court against his erstwhile professor and the RREF. Then, after the lawyer for Waksman and the RREF is reported to have admitted in a hearing on a motion by Schatz's lawyer that Waksman received $350,000 from the manufacture and sale of the drug and Schatz first allegedly learned of the Waksman-RREF agreement, Schatz amended his compliant to add other allegations.

### Schatz's Allegations

As it stands now the complaint alleges that prior to May 3, 1946 the RREF agreed to pay Prof. Waksman 20 per cent of all proceeds from the streptomycin patent. At about that time, Schatz claims that Waksman asked him to join in assigning the patent application to the RREF, without however Waksman telling Schatz about the alleged aforesaid agreement giving Waksman 20 per cent of the royalties.

Schatz alleges in his amended complaint that he refused to join in the requested assignment at that time and that Waksman then told him that by reason of Waksman's position, he would see to it that Schatz would fail to gain employment in the scientific and professional field for which he was trained if Schatz refused to execute the assignment.

Schatz then asserts in his amended complaint that since he needed work and was without business experience he feared that Waksman could prevent him from getting suitable employment, and, since he did not know of the alleged aforesaid agreement between Waksman and the RREF, Schatz executed the assignment for no consideration.

Schatz also asserts that he believes patent applications were also filed in Canada and New Zealand but that he did not execute assignments for these countries.

### Schatz's Demands

Schatz is asking the court to do several things. For one, he wants the court to set aside the assignment of the patent application. He is also demanding an accounting of all monies received by Prof. Waksman and the RREF and wants the court to fix a sum which the defendants should pay him. Schatz also wants the court to restrain Waksman and the RREF from disposing of their interest in the U. S. and Argentine patents on streptomycin. Another goal of Schatz is to have the court restrain Prof. Wakman from representing himself as the sole discoverer of streptomycin.

### Waksman-RREF Answer

In the answer of Waksman and the RREF they categorically denied all of Schatz's allegations of fraud and coercion. Indeed, their attorney is reported to have characterized Schatz's claim as "utterly without merit." It is also reported that the attorney for the defendants admitted that Schatz was concerned in the discovery but that Schatz was only one of a score of laboratory assistants.

Regarding the amount of money that Waksman has received from streptomycin sales, his attorney is reported to have stated that while Waksman did receive $350,000, he paid $180,000 as income tax and has given another $30,000 to Rutgers. Furthermore, according to the reported statement of Waksman's lawyer, the 20 per cent rate was cut to 10 per cent when the sales of streptomycin boomed.

### Special Defenses

In addition to denying specifically all of Schatz's allegations as aforesaid, Waksman and the RREF set up two special defenses. The first one is that Rutgers is the actual owner of the patent and that the RREF is holding it for the benefit of Rutgers. The defendants assert that Schatz received pecuniary and other compensation while a graduate student at Rutgers and that Schatz was a carefully supervised laboratory assistant, assisting in a part of a comprehensive plan of research using technical procedures devised and

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directed by Waksman. The defendants further allege that Schatz was employed by Rutgers to assist in the investigation and that Schatz performed his duties on the time, in the pay, in the laboratory, and with the facilities of Rutgers, and therefore the patent rights were the property of Rutgers, for the benefit of which the RREF holds the patent.

Its second defense asserted that the assignment from Schatz to the defendant RREF was made for a good and valuable consideration from Rutgers, for the benefit of which as already stated, the RREF holds the patent. Rutgers had no notice of the fraud and coercion alleged in the amended complaint and therefore holds good beneficial title to the patent.

## Re Comments

It is believed that this case presents points of great interest to the chemical and drug industries, to university-sponsored research foundations and to the universities themselves, and of course to patent attorneys; and therefore the temptation to comment is great. However, in matters such as these it is inadvisable to draw conclusions or make comments prematurely. The very importance of the case is perhaps the chief reason dictating care. For another thing, a mere allegation unless admitted cannot be taken as a fact. Proof in court is necessary. Also, there are perhaps other allegations or pertinent facts which have not as yet been determined and these may well alter the picture. In this connection it is of interest to note that the existence of the Waksman-RREF agreement and the amount of royalties received by Waksman thereunder were apparently not known by Schatz until his lawyer employing legal discovery tools elicited this information. Finally, not only ethics but a sense of fair play are on the side of withholding judgment until the court, afer considering the whole situation, renders its decision. Consequently, the most that interested third parties can or should do appears to be to follow this case with interest—which is a statement in the same general category as carrying coals to Newcastle.

## Terramycin

It is particularly appropriate that a discussion on the streptomycin situation can be followed by discussion of a recent patent issued on another important antibiotic, called Terramycin. This antibiotic has caught hold commercially and it is understood is responsible in great part for the appreciable rise in the market value of the stock of Chas. Pfizer & Co. The Terramycin patent, number 2,516,080, was issued to Sobin, Finlay and Kane, as inventors, and assigned to the Pfizer organization.

Terramycin is formed during cultivation under controlled conditions of a hitherto-undescribed species of microorganisms which the inventors have called *Streptomyces rimosus*.

Terramycin is said to share with antibiotics produced by other Streptomyces in the property of having a wide antibiotic spectrum, particularly among the Gram-negative bacteria. Among the organisms whose growth is inhibited by very low concentrations of Terramycin are the following: Aerobacter aerogenes, Streptothricin-resistant Aerobacter aerogenes, Salmonella paratyphi A, Streptomycin-resistant Salmonella paratyphi A, Salmonella paratyphi B, Chloramphenicol-resistant Salmonella paratyphi B, Escherichia coli, Pseudomonas aeruginosa, Staphylococcus albus, Staphylococcus aureus, Bacillus subtilis, Bacillus mycoides, Eberthella typhosa, Shigella paradysenteriae, Klebsiella pneumoniae, and Salmonella pullorum.

The following table shows the comparative spectra of various Streptomycin, Streptothricin, Chloramphenicol, Aureomycin and Terramycin preparations. The potency of the various antibiotic preparations used are expressed in two ways: (1) E. coli dilution units and/or (2) Chloramphenicol units per milligram. By E. coli dilutions units (CDU) per milligram, is meant the maximum volume of nutrient broth in milliliters to which one milligram of the antibiotic preparation (which may be of varying degrees of purity) may be diluted and, when inoculated with $10^{-6}$ dilution of an 18 hour culture of E. coli grown under the same conditions, still show no bacterial growth at the end of 18 hours' incubation at 37°C. By Chloramphenicol units (Chloro. u.) per milligram is meant the result of an assay using as a test organism Klebsiella pneumoniae, PCI 602, and as a test medium Baltimore Biological Laboratory antibiotic assay broth prepared according to the Food and Drug Administration formula for Streptomycin turbidimetric assay broth. The method of test is that of McMahon, J. R. (J. Biol. Chem., vol. 153, pages 249-258, April 1944), using as a standard crystalline Chloramphenicol at 10 mg. per liter.

*Concentrations of antibiotic preparation per milliliter of nutrient agar required to prevent bacterial growth on the surface of Petri dishes*

| | Terramycin[1] | | Aureomycin[2] | | Chloroamphenicol[3] | | Streptothricin,[4] | Streptomycin,[5] |
|---|---|---|---|---|---|---|---|---|
| | CDU/mg. | Chloro. u./mg. | CDU/mg. | Chloro. u./mg. | CDU/mg. | Chloro. u./mg. | CDU/mg. | CDU/mg. |
| | 20 CDU | 65 Chloro. u. | 3,840 CDU | 7,500 Chloro. u. | 1,000 CDU | 1,000 Chloro. u. | 2,200 CDU | 4,000 CDU |
| *E. typhosa* 344 | 1-2 | 6 | 4-10 | 7.5 | 1-5 | <5 | 2-6 | 12-20 |
| *Ps. aeruginosa* 173 | 20-40 | >65 | 192-384 | 375-750 | 100-1,000 | 100 | 220-2,200 | 200 |
| *S. paradysenteriae* 131 | 1 | 4 | 4 | 7.5 | <0.5 | <5 | 2-6 | 4 |
| *K. pneumoniae* 132 | 2 | 7 | 2 | 4 | 0.5-1.0 | <5 | 1 | <2 |
| *S. paratyphi A* 134 | 2-5 | 6-65 | 38-192 | 75-375 | 5-10 | 10 | 2-6 | 20-40 |
| *S. pullorum* 136 | 2-5 | 6-65 | 38 | 75 | 10 | 10 | 6 | 40-200 |
| *S. paratyphi B.* 139 | 2-5 | 6-65 | 38-192 | 75-375 | 5-10 | 5 | 22-110 | 20-40 |
| *E. coli 21* | 2-5 | 6-65 | 19-38 | 37 | 10 | 10 | 6 | 20-40 |
| *A. aerogenes* 2 | 0.2-1.0 | 2 | <0.5 | <1 | 0.5 | <5 | 2-6 | 2-4 |
| *Proteus Sp.* 1 | 20-40 | 130-190 | 384-3,840 | 750-7,500 | 10 | 10 | 6-11 | 4-12 |
| *Monilia albicans* 8 | >60 | >190 | >11,000 | >22,000 | >3,000 | >1,000 | 22-110 | >12,000 |
| *S. aureus* 3 | 1-2 | 4-5 | <0.5 | 4 | 5-10 | 10 | 6-11 | 2-4 |
| *S. albus* 5 | 1 | 4 | 38-192 | 75 | 5-10 | 10 | 6-11 | 2-4 |
| *B. subtilis* 7 | >60 | >65 | 38-192 | 5.7-75 | 1-5 | <5 | 22-110 | 12 |
| *B. mycoides* 18 | 0.2 | .6 | <0.5 | <1 | 1-5 | <5 | 110-220 | 12-20 |
| *B. subtilis* 219 | 0.2-1.0 | .6-3 | <0.5 | <1 | 1-5 | <5 | 1-2 | <2 |

[1]Terramycin—Crude material prepared as in Example II of this application, the product precipitated at pH 9 being filtered, resuspended in water and dried from the frozen state.
[2]Aureomycin—Crystalline hydrochloride.
[3]Chloramphenicol—Crystalline.
[4]Streptothricin—Streptothricin Sulphate (ex crystalline helianthate, 800 Streptomycin u./mg.)
[5]Streptomycin—Streptomycin Sulfate, 750 Strep. u./mg.

An idea of the method of making the Terramycin is obtained from Example 1 of the patent which follows:

**Medium:**

| | |
|---|---|
| **Soybean meal** | **10 Grams** |
| **Cerelose** | **10 Grams** |
| **Distillers' solubles** | **0.5 Grams** |
| **Sodium chloride** | **5 Grams** |

**Distilled water to 1000 ml.**

**pH adjusted to 7.0 with sodium hydroxide and calcium carbonate was added at the rate of 1 gram/liter.**

Five hundred ml. portions of the above medium were added to Fernbach flasks which were then sterilized at 121°C. for 30 minutes. Upon cooling, the flasks were inoculated with a suspension of the growth of S. rimosus obtained from the surface of beef lactose agar slants, and the flasks were shaken for 4 days at 28°C. on a rotary shaker having a displacement of 2" at an R.P.M. of 200. At the end of this period the broth was found to contain 640 CDU/ml. and 400 Chloramphenicol u./ml. The mycelium was separated from the broth by filtration, and the latter was adjusted to pH 9.0. The antibiotic was extracted from the broth with n-butanol, and when the ultra-violet absorption spectrum was observed on the butanol solution of the antibiotic, peaks in the absorption curve were found at 385 and 270 millimicrons.

According to the patentees, Terramycin like Aureomycin and Chloramphenicol is active in vivo as well as in vitro and displays marked chemotherapeutic

*(Continued on page 571)*

says the professor

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# YOUR TRADE-MARK RECORD

*by John H. Graham*
*International Patent and Trade-Mark Consultant*

**Our Trade-Mark System Has Been Modernized.**

When knighthood was in flower, trade-marks were known. Every knight bore upon his shield, an emblem or device by which he was identified. But in those days, the field was wide open. It was quite easy to find an identifying mark which would not conflict with that of another.

In the same manner, when the first pioneers in trade-marks went into business the field was open not only as to what they could use, but also as to what type of things they could rely upon as trade-marks.

In those days, "Smith's Cough Drops" and "Jone's Sleeping Pills" were accepted as genuine trade names. They identified the owner and thus had their basic function of defining origin of the goods. There were no real rules and regulations. You went into business, tried to let the public know how good your products were and found some name to help you in proving quality for your source of supply.

Then came the laws, rules and regulations.

They made no attempt to take from these pioneers in trade, what they had. In the Trade-mark Act of 1905, there was a ten year proviso clause, so that anyone who used a mark for ten years or more before the Act went into effect, could not be stopped from continuing such use, even though the particular mark was otherwise prohibited by the terms of the Act.

Between 1905 and 1946, there was little done to change trade-mark regulations except the Act of 1920, which generally gave rights to those who were using marks which clearly identified the goods, but which otherwise were not acceptable, the chance to register. This was equivalent to the Supplemental Register of our present (1946) act, where five years legitimate use is needed to give a person the right to register the mark, which otherwise would be refused on the Principal register.

This traces the history of trade-mark practice and registration up to the present time. The Act of 1946 (Lanham Act) was passed after years of political wrangling, to give an up-to-date business approach to the trade-mark problem. There was however just one weakness, that being the time of processing a mark from application through to registration.

Despite all the honest efforts of the trade-mark division of the Patent Office, to catch up with business, it still took too long for the processing of a mark.

From the days of the boys in shining armour to the modern world of trade is a long while. Slowly, inexorably, the field of words, symbols and signs to denote origin has narrowed.

Today, the moment a new musical comedy or a movie makes a hit, or a new weapon is presented to the world, many minds realize the popular appeal and rush to capitalize on it. There is "Carousel," "Atomic," "Black Rose" and many other examples to be seen daily.

Thus, everyone piles in for the ride and there is bound to be a collision.

It still takes many months before a trade-mark applicant knows whether he can register his mark or not and whether he is free of any encroachment upon others. In that time a lot of advertising money and effort can be expended, only to end in withdrawal, if the field is not clear.

It was one of the purposes of these columns, to consider whether in the toilet goods, cosmetic, drug and perfume fields, at lease, we could install some system of letting the other fellow know right from the start, what mark was being adopted. However, due to pressure from all sides, including our own, the Patent Office have made that unnecessary.

Now, when a trade-mark is filed in the Patent Office, it is immediately available to anyone who is interested. It should be realized that there is an essential difference between a patent and a trade-mark. The former has many dates of conception, reduction to practice, filing of the application and so on, which may be the criteria upon which the patent stands or falls.

A trade-mark has essentially only one date besides the date of application. This is the date of first commercial use. Thus, by permitting trade-mark applications to be examined by the public, the Patent Office is rendering an important service, without giving away any protection, to the trade-mark owner.

It means that before you file a trade-mark you can search for both registrations and applications. If your mark is clear, you can go ahead with no reservations of future trouble. If your mark is found in conflict, at least you know before you put in time, effort and hard cash, where you stand.

Once again, the U. S. Patent Office has proved its point of superiority over the patent offices of other countries. And once again it has provided a service which will be a boon in business and a helping hand to all of us who are interested in our several ways in trade-marks.

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4. Stable.
5. Well tolerated, orally and parenterally.

| Product | Description | Supplied |
|---|---|---|
| CALCIUM Gluconate U.S.P. | White, odorless, tasteless crystalline powder. Stable in air. | 150 lb. drums<br>50 lb. drums<br>25 lb. drums<br>5 lb. drums |
| FERROUS Gluconate N.F. | Fine, pale greenish-yellow crystalline powder. Slight odor, mild ferruginous taste. | 200 lb. drums<br>100 lb. drums<br>50 lb. drums<br>25 lb. drums<br>5 lb. drums |
| MAGNESIUM Gluconate | White, odorless, tasteless crystalline powder. Stable in air and over a wide pH range. | 100 lb. drums<br>50 lb. drums<br>25 lb. drums<br>5 lb. drums<br>1 lb. bottle |
| POTASSIUM Gluconate | Fine, white, crystalline powder, odorless, mild slightly saline taste. | 100 lb. drums<br>50 lb. drums<br>25 lb. drums |
| SODIUM Gluconate | White, stable, odorless crystalline powder with mild saline taste. | 50 lb. drums<br>25 lb. drums<br>5 lb. drums |
| MANGANESE Gluconate | White, odorless crystalline salt with faint pink tint and a slight astringent taste. | 50 lb. drums<br>5 lb. drums<br>1 lb. bottle |
| COPPER Gluconate | Light blue, odorless crystalline powder with typical metallic taste. | 25 lb. drums<br>5 lb. drums<br>1 lb. bottle |
| AMMONIUM Gluconate | Fine, white crystalline powder. odorless with a mild saline taste. | 250 lb. bbl.<br>100 lb. drums<br>50 lb. drums |

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*The following Trade-Marks were recently published in the Official Gazette of the United States Patent Office.*

**Adoration**—52—A—514,226
Soap Craft, Inc., Chicago, Ill.
Ser. Dec. 13, 1946 D. U. Nov. 26, 1946

**Ammifrice**—51—K—585,400
The Stevens-Wiley Mfg. Co., Inc., Phila., Pa.
Ser. Sept. 27, 1949 D. U. May 1949

**Aqua-Suds**—52—A—574,771
Hartman-Leddon Co., Inc., Phila., Pa.
Ser. March 2, 1949 D. U. Feb. 10, 1949

**Atom Bomb**—51—B—568,801
The Andrew Jergens Co., Cinn., Ohio
Ser. Nov. 15, 1948 D. U. July 30, 1948

**Auditorium Bath**—52—A—569,045
Armour & Co., Chicago, Ill.
Ser. Nov. 19, 1948 D. U. May 28, 1908

**Barbasol**—23—R—513,713
The Barbasol Co., Indianapolis, Ind.
Ser. Dec. 5, 1946 D. U. Jan. 1936

**Barz**—51—D—586,077
The Barbasol Co., Indianapolis, Ind.
Ser. Oct. 11, 1949 D. U. Sept. 21, 1949

**Beneat**—51—H—573,025
Associated Brands, Inc., Bklyn, N. Y.
Ser. Jan. 29, 1949 D. U. Sept. 24, 1926

**Box Office**—51—BCE—584,521
Elizabeth Arden Sales Corp., N. Y., N. Y.
Ser. Sept. 7, 1949 D. U. Feb. 7, 1949

**Brocade**—52—A—576,987
Safeway Stores, Inc., Baltimore, Md.
Ser. April 12, 1949 D. U. Feb. 10, 1949

**Chime**—52—A—577,258
Chime Cosmetics, Inc., N. Y., N. Y.
Ser. April 16, 1949 D. U. March 31, 1949

**Coquito**—52—A—578,613
Newell Gutradt Co., San Francisco, Cal.
Ser. May 11, 1949 D. U. April 18, 1949

**Dana**—51—BC—579,875
Les Parfum de Dana, Inc., N. Y., N. Y.
Ser. June 2, 1949 D. U. Since 1933

**Enchanted Evening**—51—B—582,962
Fontaine Perfume Corp., N. Y., N. Y.
Ser. Aug. 14, 1949 D. U. April 1949

**Firm**—23—R—563,169
Firm Blade Co., Portland, Ore.
Ser. April 10, 1950 D. U. July 17, 1947

**Formula 40**—52—A—583,862
Colgate-Palmolive-Peet Co., Jersey City, N. J.
Ser. Aug. 23, 1949 D. U. Dec. 1, 1935

**Grand Siecle**—51—B—576,989
Sauze, S. A. Colombes, France
Ser. April 12, 1949 D. U. Dec. 28, 1943

**Heads Above the Rest**—52—H—543,308
Mapril Inc., N. Y., N. Y.
Ser. Dec. 4, 1947 D. U. Nov. 28, 1947

**Helena Rubinstein**—51—BCDEHT—
Helena Rubenstein, Inc., N. Y., N. Y.
Ser. Dec. 21, 1946 D. U. Jan. 1, 1929

**Invisible Accessory**—51—BCH—558,007
Consolidated Cosmetics, Chicago, Ill.
Ser. May 28, 1948 D. U. May 14, 1948

**Irolene**—51—BD—582,716
Y & Y Deodorizer Co., Phila., Pa.
Ser. July 29 1949 D. U. Jan. 23, 1899

**Jewel Stick**—51—BCH—582,027
Consolidated Cosmetics, Chicago, Ill.
Ser. July 15 1949 D. U. July 11, 1949

**Juvenella**—51—H—583,758 (And Des.)
Hunt Sisters, Chicago, Ill.
Ser. Aug. 20, 1949 D. U. Aug. 6, 1949

**Med-Ammin**—51—K—580,791
The Medammin Corp., N. Y., N. Y.
Ser. June 20, 1949 D. U. Jan. 1, 1949

**Mediterranee**—51—C—583,905
Elizabeth Arden Sales Corp., N. Y., N. Y.
Ser. Aug. 24, 1949 D. U. Oct. 4, 1948

**Miselcreto**—52—A—581,252
A. Cordero, DBA Monte Alto Co., N. Y., N. Y.
Ser. June 29, 1949 D. U. June 2, 1949

**Multi-Clean**—52—A—557,200
Multi-Clean Products, Inc., St. Paul, Minn.
Ser. May 17, 1948 D. U. May, 1946

**Non-Other**—51—H—576,089
Elizabeth Villarreal, Chicago, Ill.
Ser. March 25, 1949 D. U. Nov. 10, 1947

**Nu-Lips**—51—C—577,734
Renior Parfums, Ltd., N. Y., N. Y.
Ser. April 26, 1949 D. U. April 19, 1949

**O'Press**—51—H—575,017
J. W. Rawls, DBA Golden State Supply, Los Angeles, Calif.
Ser. March 7, 1949 D. U. April 1940

**Pond's Talc**—51—C—517,324
Pond's Extract Co., N. Y., N. Y.
Ser. Feb. 11, 1947 D. U. May 15, 1946

**Q-Cream**—51—C—567,711
Q-Tips Inc., Long Island City, N. Y.
Ser. Oct. 27, 1948 D. U. July 16, 1948

**Q-Talc**—51—C—567,714
Q-Tips Inc., Long Island City, N. Y.
Ser. Oct. 27, 1948 D. U. July 16, 1948

**Roux-Silver-Wyte**—51—H—550,741
Roux Dist. Co., N. Y., N. Y.
Ser. Feb. 27, 1948 D. U. Feb. 19, 1936

**Rush**—52—A—587,370
The M. Werk Co., St. Bernard, Ohio
Ser. Nov. 4, 1949 D. U. May 24, 1949

**Ruth Manners**—51—BC—570,108
R. H. Macy & Co., Inc., N. Y., N. Y.
Ser. Dec. 7, 1948 D. U. Feb. 14, 1941

**Snow White**—51—BCDH—511,030
Morton Mfg. Corp., DBA Snow White Products Co., Lynchburg, Va.
Ser. Oct. 17, 1946 D. U. April 1923

**The Most Treasured Name in Perfume**—52—A—550,583
Chanel, Inc., N. Y., N. Y.
Ser. Jan. 27, 1950 D. U. Since 1942

**The Most Treasured Name in Perfume**—51—BC—550,309
Chanel, Inc., N. Y., N. Y.
Ser. Feb. 21, 1948 D. U. Since 1942

**Try Three**—51—B—576,120
Lucien LeLong, Inc., Chicago, Ill.
Ser. March 26, 1949 D.U. March 15, 1949

**Vesper**—52—A—576,988
Safeway Stores Inc., Baltimore, Md.
Ser. April 12, 1949 D. U. Feb. 10, 1949

**Act of 1946**

*The following Trade-Marks have been recently republished under the terms of the above (Lanham Act). No opposition can be filed against them but they are all subject to cancellation proceedings.*

**Black Arrow**—VI—T—270,504
Reg. May 6, 1930 to McCormick & Co., Inc., Baltimore, Md.
Republished by registrant

**Magic**—51—D—140,790
Reg. March 29, 1920 to Benny & Denny
Republished by Frances Denny, Phila., Pa.

**Mavis**—51—BC—112,735 (And Des.)
Reg. Sept. 19, 1916 to V. Vivaudou.
Repub. by The Nestle LeMur Co., N. Y., N. Y.

**Neutrodor**—VI—D—236,418
Reg. Dec. 13, 1927 to U. S. Sanitary Specialties Corp., Chicago, Ill.
Repub. by registrant

**Old Gold**—51—I—268,405
Reg. Mar. 11, 1930 To The William A. Webster Co., Memphis, Tenn.
Repub. by registrant

**Olivena**—52—A—233,111
Reg. Sept. 20, 1927 to U. S. Sanitary Specialties Corp., Chicago, Ill.
Repub. by registrant

**Peroxotone**—51—I—410,568
Reg. Dec. 5, 1944 to S. Albert
Republished by Peroxotone Labs., Inc., N. Y., N. Y.

**Qualitest**—51—18—K—270,654
Reg. May 13, 1930 To The William A. Webster Co., Memphis, Tenn.
Repub. by registrant.

**Spiro**—51—D—32,829
Reg May 9, 1899 to C. P. Chisholm
Repub. by Spiro Powder Co., Inc., Buffalo, N. Y.

**Whirlwind**—51—B—401,131
Reg. April 27, 1943 to Frances Denny, Phila., Pa.
Repub. by registrant

**Velvetia Cold Cream**—51—C—375,380
Reg. Feb. 20, 1940 to Physicians & Hospitals Supply Co., Inc., DBA Ulmer Pharmacal Co., Minneapolis, Minn.
Republished by registrant

# READERS' QUESTIONS

*STRAWBERRY FLY REPELLENT: We are interested in obtaining information concerning the formulation of an insect repellent against a specific type of fly. This fly is known as the "strawberry fly" and is found in the area about Salem, New Jersey. Any information on methods of repelling and destroying this insect will be greatly appreciated. Salem.*

We have referred your inquiry to the United States Department of Agriculture, who in turn referred it to Elton J. Hansens, Associate Research Specialist in Entomology at Rutgers University. He wrote, "The strawberry fly is also commonly known as the deer fly or pine fly here in New Jersey. There are about forty different kinds of these insects in the state all belonging to the genus *Chrysops*. There is no completely satisfactory repellent for use against these insects. Probably the best available is one of the three leading mosquito repellents known as indalone. The other two mosquito repellents will also do a fair job against *Chrysops*. These two materials are Insect Repellent 612 (ethylhexandiol) and dimethyl phythalate.

"It has been my experience that these repellents will reduce the number of bites obtained from the flies, but will not prevent them from hovering around the head. Of course, this habit of the flies is almost as annoying as their bites, and as far as I know there is no way of preventing it. Very little is known about the habits of many of these flies and there is no recommended measure for obtaining their control."

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# READERS' QUESTIONS

*CREAM SHAMPOOS: Do you have any literature or bulletins on the manufacturing of cream paste shampoo or liquid cream shampoo? We would appreciate greatly, any literature you might send us on these products. We are subscribers to your magazine and wish to state that it has been very helpful to us in many cases. Rahway.*

I regret that we do not have any specific literature or bulletins on the manufacture of cream paste or liquid cream shampoo. However, from time to time we have published suitable formulas. For example, a formula for a cream shampoo was given in DRUG AND COSMETIC INDUSTRY for January 1949, page 124. A liquid cream formula for making a shampoo was given in the September 1949 issue, page 331.

*NOSE DROPS: Some few months back there appeared in your publication a formula for nose drops using ephedrine and, we believe, dextrose in an isotonic, aqueous solution. As we remember it, ephedrine was used as the constrictor because it is more effective than the synthetic ephedrine-like compounds and the action was of longer duration. This formula, it seems to us, minimized any toxic reactions or side effects of the ephedrine and was practically non-irritating. There were some references given to support these advantages. We would appreciate very much a copy of this formula and the other information given along with it. Fort Worth.*

It occurred to me that a product of this sort was cited in my article written in March 1945 on Nasal Preparations, and I found that this was the case. The following product developed by Tozer and Arrigoni (J. A. Ph. A. Scient. Ed. 30:189, 1941), is isotonic, buffered and preserved:

| | | |
|---|---|---|
| **Ephedrine sulfate** | **0.50** | **Gm.** |
| **Potassium sulfate, monobasic** | **0.50** | **Gm.** |
| **Sodium phosphate, dibasic** | **0.50** | **Gm.** |
| **Potassium chloride** | **0.15** | **Gm.** |
| **Sodium chloride** | **0.15** | **Gm.** |
| **Dextrose, anhydrous** | **0.9969** | **Gm.** |
| **Preserved water, to make** | **100.00** | **cc.** |

If a 1 per cent solution of ephedrine sulfate is desired, the amount of dextrose in the above formula is reduced to 0.7867 Gm., and for a 2 per cent solution the dextrose is further reduced to 0.3663 Gm. The preservative used in making the "preserved water" is 0.04 per cent of a combination of 65 parts of methyl parahydroxybenzoate and 35 parts of propyl parahydroxybenzoate. This combination produces no irritation and has proved to be effective in preventing the growth of micro-organisms upon exposure to infection.

*HAIR COLOR RESTORER: We are looking for a formula for a preparation for artificially darkening gray hair which contains alcohol, sulphur and lead acetate, and which can be applied like a hair tonic. If you have a book with formulas for such preparations, please let us know. Moravia.*

Products of this sort are described in "Modern Cosmetics" by Thomssen. From this book I take the following formula which is along the lines suggested in your letter:

| | | |
|---|---|---|
| **Sulphur** | **5.0** | **per cent** |
| **Lead acetate** | **4.0** | **" "** |
| **Glycerine** | **5.0** | **" "** |
| **Water** | **80.5** | **" "** |
| **Perfume** | **0.5** | **" "** |
| **Alcohol** | **5.0** | **" "** |

Rub up sulphur with glycerine to make a paste. Dissolve the acetate of lead in the water, add sulfur and the perfume mixed with alcohol. In many states lead products are illegal.

*HAIR TONICS: Will you kindly inform me where I can procure a special formula for a hair tonic that I am contemplating putting up? I assure you that any information you may furnish will be greatly appreciated. Pittsburgh.*

This is quite an extensive field and I would suggest that you acquaint yourself with it by reading one or two books on dermatology. An excellent chapter on such products appears in Thomssen's "Modern Cosmetics." From this book I take the following typical formula, which may meet your needs:

| | | |
|---|---|---|
| **Eau de cologne essense** | **10.0** | **per cent** |
| **Alcohol** | **70.0** | **" "** |
| **Glycerine** | **4.0** | **" "** |
| **Tincture of cinchona** | **4.0** | **" "** |
| **Tincture of quillaja** | **6.0** | **" "** |
| **Rose water** | **6.0** | **" "** |

Add the tinctures to the alcohol and then add the glycerine, eau de cologne and rose water. Mix and filter.

The following is based on "Euresol," which is a quite popular ingredient of hair and scalp care preparations:

| | | |
|---|---|---|
| **Resorcinol Monacetate ("Euresol")** | **3.5** | **per cent** |
| **Alcohol** | **56.0** | **" "** |
| **Distilled water** | **40.0** | **" "** |
| **Perfume** | **0.5** | **" "** |

Salicylic, boric and formic acids, castor oil, glycerine, etc., may be added to the foregoing formula if desired.

# COMPOUNDER'S CORNER

## Stable Hair Cream

In a discussion of advances in emulsification, K. S. Wintersteiner (*Manuf. Chem.* 21:238, 1950) states that an interesting development in the manufacture of brilliantine and hair dressing has been the increased use of alkyl amino esters. These products, which are marketed under a number of brand names, are held to improve the strength of the hair fibre by combining with the cysteine-cystine part of the keratin of the hair. In this way increased flexibility and strength is put into the hair, with a consequent improvement in the condition of the hair as a whole. The formula for a new American product marketed nationally in this field has been found by the worker to be as follows:

| | |
|---|---|
| **Mineral oil** | **10.0 per cent** |
| **Super-glycerated coconut oil** | **20.0 " "** |
| **Alkyl amino oleate** | **5.0 " "** |
| ***p*-Chlor octyl cresol** | **0.1 " "** |
| **Cetyl alcohol** | **2.0 " "** |
| **Water** | **62.9 " "** |
| **Perfume** | **trace** |

This product has the advantage of standing up to the extremes of climate found in the U. S.—where temperature differences of 60°C. have to be taken into account.

## New Midge Repellent Cream

According to a note in *Soap, Perfumery and Cosmetics* (23:485, 1950), a new midge repellent cream has been developed by J. P. Todd and A. B. Gilmour for the Scottish Scientific advisory Committee. The new formula, which may be used without proprietary restriction, consists of:

| | |
|---|---|
| **Dimethyl phthalate** | **200 Gm.** |
| **Magnesium stearate** | **30 Gm.** |
| **Zinc stearate** | **70 Gm.** |

The product resulting from the simple but unusual formula is described as a pleasantly textured cream or salve that spreads smoothly on the skin, imparting a slightly fatty sensation but leaving a uniformly matt surface. Smeared on the exposed parts of the body this new product is claimed to ward off midges for at least three hours, and is more effective in giving protection than the cream introduced by the committee in 1946. The new cream has the advantage of not being washed off by perspiration. Like the 1946 preparation it does not harm the skin, although some slight tingling may be felt when first applying it and afterwards when it is being washed off. It is recommended, however, that the cream should not get into the eyes, nor should it come into contact with tortoiseshell or plastic spectacle frames.

## Fatty Alcohols Data Sheet

A new data sheet showing typical analyses of Cachalot fatty alcohols is now available from M. Michel & Co., Inc., 90 Broad St., New York 4, N. Y. This listing covers cetyl, stearyl and oleyl alcohols and mixtures of these materials. It should be of interest to drug and cosmetic formulators.

## Hair Coloring Compositions

According to British patent 593,314, granted to R. L. Evans, dry free-flowing powders capable of being dissolved in water to form hair color rinses comprise an acid-soluble hair dye and recrystallized, preferably cold-washed, sulfamic acid. Boric acid may also be present as well as soluble diluents such as sucrose and mannitol. In examples, rinses are made by dissolving in water (1) Peacock Blue, Medium Orange, Amaranth, Dark Yellow and recrystallized sulfamic acid; (2) Medium Orange, Amaranth and recrystallized sulfamic acid; (3) Black, Medium Orange, Ponceau and recrystallized sulfamic acid; and (4) Medium Orange, Amaranth, recrystallized sulfamic acid and boric acid.

## Booklet on Gallates

A comprehensive factual outline of the value of propyl gallate and ethyl gallate as antioxidants and stabilizers is given in a booklet issued by the Goldschmidt Chemical Corp. A listing of some typical cosmetic and pharmaceutical uses of propyl gallate, as well as its employment in essential oils indicates the wide utility of this compound. Chemical and solubility data on propyl gallate as well as methods for incorporating this substance into various materials are provided. Copies of this publication are available on request from the Goldschmidt Chemical Corp., 153 Waverly Pl., New York 14, N. Y.

## Vitamin D in Cosmetics

In Swiss patent 256,967, I. Dainow states that in concentrations of at least 250 International Units (I. U.) per gram, vitamin D in cosmetics exerts a protective effect against irritation and a slight drying effect on oily skin. Illustrating the use of vitamin D is the following formula for a lip rouge:

| | |
|---|---|
| **Beeswax** | **32 Gm.** |
| **Castor oil** | **33 Gm.** |
| **Sesame oil** | **22 Gm.** |
| **Lanolin** | **13 Gm.** |
| **Vitamin D** | **30,000 I. U.** |
| **Color, perfume and antioxidant** | **sufficient** |

## Purified Stearic Acid

In attempts to purify commercial stearic acid, P. J. Janardhanam (*J. Sci. & Indust. Res.* 9:46, 1950) has tried fractional crystallizations of the farty acid from acetone and methyl alcohol, acetone and rectified spirit and benzene and methyl alcohol binary mixtures. He found that three crystallizations from a mixture of acetone and methyl alcohol, in a 4:1 ratio, gave the best results. A product of 96 per cent purity, melting at 68.9°C. was obtained, with an overall recovery of 20 per cent pure stearic acid.

## Thiamine Mononitrate

The advantages of thiamine mononitrate are indicated in the studies made by T. J. Macek, B. A. Feller and E. J. Hanus (*J. A. Ph. A.*, Scient. Ed. 39:365, 1950). They report that thiamine mononitrate, the salt formed from one mole of thiamine base and one mole of nitric acid, occurs as an anhydrous crystalline solid of low hygroscopicity, differing in this respect from thiamine hydrochloride. The stability of thiamine mononitrate was investigated in sterile solutions, compressed tablets, multivitamin capsules and dry-filled capsules. Assay data are given to show that thiamine mononitrate is more stable than thiamine hydrochloride

in these preparations. The use of thiamine mononitrate in B complex capsules eliminated the need for an acidic stabilizer, the presence of which accelerated the decomposition of the pantothenic acid component.

## Liquid Shaving Soaps

In discussing the production of liquid shaving soaps, T. Ruemile (*Alchimist* 4:133, 1950) states that there are two types of products. These are the clear preparations and the more-or-less thick, milky soaps, based mostly on stearic acid. These soaps are also distinguished by the quality of lather produced. Soaps made from stearic acid yield a creamy, dense and almost compact lather that cannot be obtained with the other type even after abundant and prolonged use of the soap. He notes that the attainment of the necessary lathering capacity depends chiefly upon the judicious choice of the fatty agents. Tallowy fats may preferably be used, since they are expected to be responsible for and to assist in securing the profuse, firm and permanent lather which facilitates appreciably the shaving procedure. The viscosity of liquid shaving soaps may conveniently be adjusted either by complete neutralization or by superfatting with stearic acid or by the use of an emulsifier, e.g., cetyl alcohol. If the soap contains an alkal excess of 0.01 per cent, the consistency and the color of the preparation would match the ordinary milk after the necessary water quantity has been incorporated. The addition of stearic acid for superfatting purposes rises the consistency to resemble thick, creamy milk. But it should be remembered that such additions must be performed very carefully as not to thicken the soap.

Two general formulas for making clear liquid shaving soaps are given, as follows:

| | I | II |
|---|---|---|
| Fatty agents | 29.1 | 29.7 |
| Saponifying agents | 26.0 | 27.7 |
| Glycerine | 24.1 | 21.3 |
| Alcohol | 20.8 | 21.3 |

The fatty agents include generally tallow, coconut oil, oleic acid, etc., while the saponifying agents comprise solutions of potassium hydroxide (50° Be) and potassium carbonate (20 per cent) in appropriate proportions. The fats are mixed thoroughly with potassium hydroxide at about 60°C and left for saponification. Both the moderately heated potassium carbonate and the glycerine are then stirred in, and finally the alcohol. If satisfactorily cooled, the perfume is added, and the preparation left to clear. After that, filtration is recommended.

A stearic acid-containing soap may be made along the following lines:

| | |
|---|---|
| **Stearic acid** | **10.0 per cent** |
| **Fatty agents** | **11.6 " "** |
| **Saponifying agents** | **9.7 " "** |
| **Glycerine** | **10.0 " "** |
| **Alcohol** | **2.9 " "** |
| **Water** | **55.8 " "** |

Both the solution of the saponifying agent (potassium hydroxide) and the alcohol are heated to about 70° C. The mixture of the stearic acid and the fatty material is heated to the same temperature and stirred cautiously into the alcoholic potash solution. The saponification progresses rapidly, owing to the presence of the alcohol.

## Sterol Compounds in Cosmetics

As noted in the *Perfumery and Essential Oil Record* (41:267, 1950) much attention has been focused recently upon the emergence of purified animal sterol compounds as a group of non-ionic surface active agents of promising commercial potentialities. This has been principally due to improved methods of separation and purification from the animal by-products that are their source which, in turn, have lowered production costs. Sterol emulsions cover a large viscosity range. They may be used in both oil-in-water and water-in-oil emulsions and have good temperature stability. Formulations have been prepared that are stable at extremes of—20 deg. C. and + 115 deg. C. The principal active factor of most of the commercially available sterol emulsifiers is free cholesterol with or without, depending on the ultimate use, the related sterols: agnosterol, lanosterol, 7-dihydrocholesterol, and dihydrocholesterol. Ceryl and melissyl alcohols are also usually present. The main sources of the animal sterols are the animal fats, waxes, and oils derived from the brain, spinal cord, skin liver and other organs.

The sterols are used in creams and lotions as emulsifiers, stabilizers, and emollients. In lipsticks they help to solubilize bromo acid dyes and increase the penetration properties of the stick. They are used in cream shampoos, permanent wave solutions and in other products for the hair where they act as stabilizers, conditioners, and penetrants. The presence of sterols in cleansing creams and lotions results in marked improvement in detergency.

## Thermometer Disinfectants

In response to an inquiry concerning suitable agents for disinfecting thermometers, it is noted in the *American Professional Pharmacist* (16:689, 1950), that no chemical disinfectant can be relied upon for complete bactericidal effect under the usual temperature conditions and within a reasonable time. However, it is pointed out that the following formulas for disinfection of thermometers are used in various hospitals:

**I**

| | | |
|---|---|---|
| **Potassium mercuric iodide** | **0.1** | **part** |
| **Acetone** | **85.0** | **parts** |
| **Distilled water** | **15.0** | **"** |
| **Eosin** | | **to color** |

**II**

| | | |
|---|---|---|
| **Formaldehyde solution, U.S.P.** | **130.00** | **parts** |
| **Potassuim nitrite** | **0.15** | **"** |
| **Sodium hydroxide** | **0.012** | **"** |
| **Ethyl alcohol, 95%, to make** | **1000.00** | **parts** |

**III**

| | | |
|---|---|---|
| **Triethanolamine** | **60** | **parts** |
| **Oil of cinnamon** | **4** | **"** |
| **Formaldehyde solution, U.S.P.** | **160** | **"** |
| **Distilled water** | **780** | **"** |
| **Isopropyl alcohol** | **1000** | **"** |

Quaternary ammonium compounds, in a dilution of 1:1000, are also used, but they have a tendency to remove pigment in the calibrated portion of the instrument after several months. A minimum of 30 minutes contact with a disinfectant is desirable. It is also noted that most hospitals still employ 70 per cent alcohol as a routine thermometer disinfecting solution.

## Condensed Data on Synthetic Organic Chemicals

The 1951 edition of the booklet, "Physical Properties of Synthetic Organic Chemicals," has been issued by Carbide and Carbon Chemicals Division, Union Carbide and Carbon Corporation. This 16-page booklet is a condensed guide for users of organic chemicals. It presents data on applications and physical properties of more than 250 synthetic organic chemicals in tabular form for ready and easy reference. Copies may be obtained without charge by writing to Carbide and Carbon Chemicals Division, 30 East 42nd Street, New York 17, N. Y. Ask for Form 6136.

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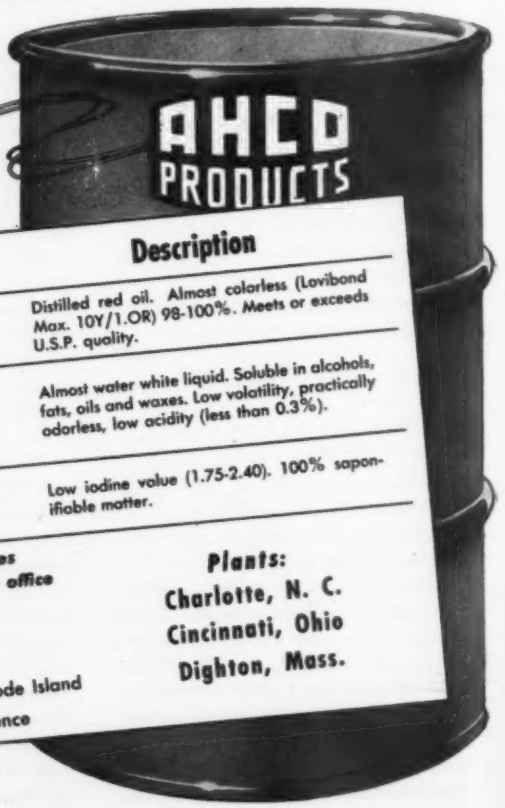


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# ADVANCING THERAPY

### Radioactive Iodine in Thyrotoxicosis

That the use of radioactive iodine has found an established place in the treatment of thyrotoxicosis is indicated in the study made by E. S. Gordon and E. C. Albright (*J. A. M. A.* 143: 1129, 1950). One hundred and twenty cases of hyperthyroidsim treated with radioactive iodine and followed for five to 33 months are reported by these workers. They found that all patients responded to therapy, and all have returned to euthyroid status except three who have become hypothyroid and several patients who recently began but have not yet completed therapy. Both nodular and diffuse goiters have been treated, and no consistent difference has been noted in the rate or mode of response. Untoward reactions to radioactive iodine have not been seen.

On the basis of such observations they consider the use of radioactive iodine the treatment of choice for toxic goiter, excepting only goiters during pregnancy, large goiters producing mechanical obstruction and very hard glands involving the danger of malignancy.

Very similar are the conclusions reached by R. Robbins (*Postgrad Med.* 8:25, 1950. In his opinion radioactive iodine represents a satisfactory, even an elegant way to produce a lasting remission of thyrotoxicosis in over 80 per cent of its victims, without major sequelae. Its final role in the treatment of thyrotoxicosis, along with surgery and the antithyroid drugs, remains to be evaluated.

### Tromexan-New Anticoagulant

According to a note in *Science News Letter* 58:8, 1950), good results were reported by I. S. Wright, C. W. Sorenson and G. Burke with a new drug for checking dangerous blood-clotting tendencies in certain heart and blood vessel diseases. Tromexan is the name of the new drug which chemically is the ethyl ester of di-4-hydroxy-coumarinyl acetic acid. In animal studies and trial on more than 60 patients the drug showed a faster action than the older anti-clotting drug, dicumarol. In most cases the blood showed a response within 24 hours. When the drug was stopped, its effect on the blood stopped more quickly than is the case with dicumarol. These are considered to be important advantages for the treatment of acute thromboeinbolic conditions. In addition to the work done by these investigators, the drug has also undergone trials in several European countries.

### Potassium Diet vs ACTH Toxicity

The possibility that some of the damaging side effects of adrenocorticotropic hormone—ACTH—may be counteracted by a high potassium diet has been presented in research being carried out L. L. Bennett and J. E. Whitney. According to a note in *Chemical and Engineering News* (28:2530, 1950), their work has been confined to a study of the effects on rats of ACTH injected after high potassium diets. It has been found that the high potassium diet halted the departure of nitrogen from the body, ordinarily caused by tissue breakdown resulting from ACTH treatment. Implications of the work are being investigated.

### Vitamin Therapy for Senile Psychoses

In the *Canadian Medical Association Journal* (62:162, 1950), N. Viner reported that elderly patients undergoing a more than gradual personality deterioration responded so well to intensive vitamin therapy that it became obvious that avitaminosis had been the cause and that real senility and previously diagnosed arteriosclerosis were not factors in the mental state. Viner accumulated evidence that blood concentration was not a true indicator of vitamin deficiencies because of the important role played by tissue storage. Four illustrative cases are reported to show that gross cumulative depletion of vitamins could be rapidly overcome by daily injection of 1 cc. of the vitamin B complex together with 1 cc. (100 mg.) of thiamine hydrochloride in the same syringe. This parenteral therapy is supplemented by administration of a vitamin B complex preparation by mouth. The intensive treatment is continued for from 10 to 14 days. If results are "strikingly favorable," it is to be assumed that a cure has been accomplished.

### Treatment of Pyodermas

The management of pyodermas, cutaneous infections caused by various pus-producing organisms, has been discussed in some detail by J. F. Madden (*Minnesota Med.* 33:462, 1950). He notes that superficial pyodermas respond to topical medication; deeper ones require oral or parenteral administration of drugs. Wet packs are among the oldest methods of applying medication to skin infections. The packs should be thick, but of porous material, such as washed surgical gauze, and they should never be covered with oiled silk, rubber or other impermeable material.

Sulfanilamides have largely given way to the more effective and less toxic penicillin for treatment of this type of infection. It can be used topically as a wet pack, ointment or spray; as an inhalation; orally in liquid, capsule or tablet; and parenterally. Reactions from penicillin are relatively few and minor, but they can be severe. It is advisable to reserve penicillin for parenteral use for other conditions in which life may be at stake. Tyrothricin used as a wet dressing has given indifferent results with pyodermas. Madden has not personally used streptomycin or chloromycetin, so he cannot report on their efficacy. Aureomycin given orally has achieved dramatic results in one type of pyoderma resistant to usual forms of therapy, but the cost of the drug seems prohibitive. Furacin was found to have a very high sensitization index. The older topical applications of cinnabar, ammoniated mercury ointment, quinolor compound ointment, and the like, still have a prominent place in the treatment of superficial pyoderma. X-ray therapy has been of considerable aid in controlling some cases. On the basis of his own experience, Madden is of the opinion bacitracin ointment is the most effective topical medication in the treatment of pyoderma. Its sensitizing index is very low. In more severe cases with deep infection, parenteral penicillin seems most satisfactory.

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## Protamide for Herpes Zoster

The usual clinical course herpes zoster, says W. C. Marsh (*U. S. Armed Forces Med. J.* 1:1045, 1950), is that of preceding hyperesthesia, itching, or pain, followed by the appearance of tense, grouped vesicles on an erythematous base along the course of the affected nerve. Within 48 hours, the lymph nodes in the vicinity are usually enlarged and tender; a point of importance in differential diagnosis. Since protamide has been recommended for use in controlling the pain of herpes zoster, he decided to try it in a series of cases. Given intramuscularly, protamide is a colloidal solution of a processed and denatured proteolytic enzyme obtained from the glandular layer of fresh hog stomach by controlled pepsin reactions in water baths.

In the 31 cases of herpes zoster treated with protamide, good to excellent results were obtained in 28. While this series of cases is small and clinical evaluation of the relief of pain in this disease difficult, Marsh believes that protamide is of definite value in the relief of pain in herpes zoster. Further, vesicles and crusts disappear much more rapidly than in untreated cases. The relief of pain was superior to that obtained when using either pituitrin, thiamin chloride, autohemotherapy, sodium iodide, or high-voltage roentgen therapy. The advantages of protamide are the simplicity and absence of pain in administration, lack of reactions, and its apparent safety.

## Treatment of Pruritus Ani

In his report on the treatment of pruritus and with a preparation containing paranitrophenol and sodium lactate, H. K. Belnap (*Rocky Mt. Med. J.* 47:361, 1950) points out that this condition may be caused by bacterial, fungous or trichomonal infection. It may also be due to a neurosis, to syphilis, the menopause, genitourinary disease, pregnancy, hepatic disease, diabetes or allergy. He reports on 100 cases in which the laboratory isolated a fungus from scrapings of the perianal tissues. The fungi isolated most frequently were the epidermophyton and trichophyton. The anal canal was examined for other pathologic conditions. If associated cryptitis or papillitis was found, the following treatment was instituted: sulfathalidine by mouth for a period of ten days; sulfadiazine cream injected into the rectum twice daily; sitz baths twice daily, and mild laxative agents to produce a soft stool. The perianal skin was treated with a preparation consisting of paranitrophenol and sodium iodate in isopropyl alcohol, to which had been added substances which act as wetting agents. Treatment with this compound effected cure in 91 of 100 cases; 5 patients had a recurrence, and 4 failed to respond.

## Terramycin in Pneumonia Therapy

The potentialities of the new antibiotic, terramycin, for the treatment of pneumococcic and primary atypical pneumonia are shown in the report of G. W. Melcher, C. D. Gibson, Jr., H. M. Rose and Y. Kneeland, Jr., (*J. A. M. A.* 143:1303, 1950). In their hands terramycin proved to be an effective agent in the treatment of 18 patients with lobar pneumonia due to a typed pneumococcus and 7 patients with primary atypical (virus) pneumonia. The response to terramycin therapy was considered excellent in every case, and there were no cases in which the treatment failed. The only untoward side effects attributable to the terramycin therapy were symptoms of gastrointestinal irritation. These resembled the symptoms seen after the administration of aureomycin, but seemed less severe.

## New Drug for Hyperthyroidism

In the *Journal of the American Medical Association* (143:1407, 1950), W. S. Raveno and H. Rosenbaum report their observations on a new antithyroid drug, 1-methyl-2-mercaptoimidazole (tapazol). The new compound is one of the imidazoles and differs from the well known antithyroid drugs in that it has a five-membered rather than a six-membered ring.

Comparative studies place the action of the drug above that of thiouracil, methylthiouracil, propylthiouracil and 2-mercaptoimidazole and rate its potency at 100 times that of thiouracil.

In their clinical trials, of 18 patients with hyperthyroidism treated with this new antithyroid compound, 3 with toxic diffuse goiter attained remission in approximately eight weeks. Two of these patients had been given 2 mg. of the drug every eight hours and 1 patient 5 mg. every twelve hours. Three patients with toxic adenoma reached remission in five to six weeks on a dosage of 2 mg. of the drug every eight hours in the first, 5 mg. every twelve hours in the second and 2 mg. every twelve hours in the third. Symptoms of 10 patients under treatment with propylthiouracil continued under control when 1 mg. of the new compound was substituted for each 25 mg. of the old. Two patients in mild relapse were readily controlled with 2 mg. of the new agent given every twelve hours for seven to eight weeks.

In concluding Raveno and Rosenbaum state that in the small group of patients observed, 1-methyl-2-mercaptoimidazole (tapazol) exhibited effective antithyroid activity closely resembling that of propylthiouracil but with a potency approximately twenty-five times greater. Toxic reactions were not encountered, but more time and treatment of a larger number of patients will be required for assessment of this highly important factor.

## Steroids in Rheumatoid Arthritis

In the work done by H. F. Polley and H. L. Mason (*J. A. M. A.* 143:1474, 1950), 12 steroids other than cortisone and four adrenal cortex extracts have been administered to a select group of patients with rheumatoid arthritis to compare anti-rheumatic activity of these substances with that of cortisone. In the dosage schedules used, only 17-hydroxy-corticosterone, adrenal cortex extract given orally and possibly a concentrated adrenal cortex extract in propylene glycol had any objectively demonstrable degree of antirheumatic activity against rheumatoid arthritis. Further study of these substances, as well as cortisone given orally, and larger doses of 11-dehydrocorticosterone would be desirable.

An increased excretion of 17-ketosteroids was observed during administration of 11-desoxycortisone, 17-hydroxyprogesterone, 21-desoxycortisone and pregnenetriolone acetate but not during administration of 17-hydroxycorticosterone and 6-dehydrocortisone or any of the steroids which did not have a hydroxyl group at carbon 17. Increased amounts of corticosteroids were excreted when those steroids with an *a*-ketol side chain were administered but not when pregnenetriolone acetate was given.

Based on the criteria and dosage schedules used in this study of rheumatoid arthritis, it would appear that antirheumatic properties of the steroid structure are dependent on the presence of a ketone group at carbon 3, either a ketone or a hydroxyl group at carbon 11, a ketone group at carbon 20, hydroxyl groups at carbon 17 and 21 and a double bond between carbon atoms 4 and 5. While proof of this supposition must await additional experience, the presently available chemical and critical clinical evidence indicates that these requirements are met only in cortisone, 17-hydroxycorticosterone (compound F) and adrenal cortex extracts containing significant amounts of these two steroids.

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# INDUSTRY'S BOOKS

*Handbook of Digestive Diseases*, by John L. Kantor, M.D., F.A.C.P., Late Associate in Medicine, Columbia University; And Anthony M. Kasich, M.D., F.A.C.P., Lecturer in Medicine, Columbia University; Second Ed., Illus., 568 pp., The C. V. Mosby Co., St. Louis, $11.

This volume represents an attempt to put down the salient and essential facts concerning gastrointestinal diseases. It is a twofold effort: first, a concise presentation of the fundamental aspects of digestive diseases, and, second, an approach to the subject on a sound physiological basis. The fact that gastroenterology is an important and inseparable segment of internal medicine has been stressed throughout. This book is based in part on the course in gastroenterology given annually at Montefiore Hospital. A critical evaluation of many important contributions by others in this field has been included. This book is essentially a new work by Dr. Anthony M. Kasich, Dr, Kantor having died just as the new edition was getting under way.

*The Physical Chemistry of Electrolytic Solutions*, by Herbert S. Harned, Professor of Chemistry, Yale University and Benton B. Owen, Professor of Chemistry, Yale University, American Chemical Society Monograph Series, Second Ed., 645 pp., Reinhold Publishing Co., New York, $10.

This is a new edition of this authoritative treatise on the theory and properties of strong and weak electrolytes. The book as a whole is the only work that covers both theory and experiment comprehensively. In its development, a logical approach rather than an historical one is adopted. This leads to a closely integrated presentation of the entire subject, and full use of the theory in the treatment of all experimental results. Recent advances in the field have been fully covered in a lengthy appendix. Among the subjects given particular attention in this appendix are the ionization of weak electrolytes in salt solutions, the dissociation of strong and moderately strong electrolytes, diffusion, conductance, ionic hydration, the extrapolation of apparent molal quantities, and extensive new data on activity coefficients. Revised values of the physical constants (Birge, 1941) and new information regarding the temperature and pressure variations of the dielectric constant and density of water have been used to revise and considerably extend the tables of theoretical coefficients and limiting slopes. Formulas and tables are presented for easy and accurate extrapolation of apparent molal quantities. This is a basic treatise of the greatest importance not only to physical chemists but to research workers in biology, medicine, and electrochemistry.

*Bacterial Infection in Dental Practice*, by J. L. T. Appleton, B. S., D. D. S., Sc.D., Professor of Bacteriopathology and Dean, The Thomas W. Evans Museum and Dental Institute School of Dentistry, University of Penna., Fourth Ed., Illus., 644 pp., Lea & Febiger, Phila., $10.

This work clearly summarizes the clinical and laboratory experience necessary to an adequate understanding of infection. The practitioner of medicine or dentistry must know how bacteria produce disease and how the host is affected by it. A further purpose of this book is to show the dentist how a knowledge of infection will assist him in solving his problems and how important and useful this knowledge becomes for the proper care of the mouth. Part I of this work is designed to acquaint the reader with a minimum of information upon the morphology, physiology and ecology of bacteria. Part II treats the subject of infection as an entity, while Part III presents a summary and an analysis of what is known about the common infections associated with the oral cavity.

*Primer of Allergy*, by Warren T. Vaughan, M.S., M.D., Revised by J. Harvey Black, M.D., Dallas, Texas, Third Ed., 175 pp., C. V. Mosby Co., St. Louis, $3.50.

This is a guidebook for those who must find their way through the mazes of this strange and tantalizing state. Like the other publications of Dr. Vaughan, the Primer proved to be a very popular book. Written with the authority derived from his great knowledge and wide experience, it became a source book for the patient suffering from allergy and the general practitioner with a limited experience in this field. Dr. Vaughan died before the time came to bring this book up to date. The task of revision fell to Dr. Black who kept the work much as it had been and made changes only where required by the advances in knowledge since the publication of the last edition.

*Penicillin and Streptomycin in the Treatment of Infections*, by Chester S. Keefer, M.D., Wade Professor of Medicine, Boston University School of Medicine, and Donald G. Anderson, M.D., Instructor in Medicine, Boston University School of Medicine, Edited by Henry A. Christian, M.D., Hersey Professor of the Theory and Practice of Physic, Emeritus, Harvard University, Reprinted from Oxford Loose-Leaf Medicine with the same page numbers as in that work, Oxford University Press, New York, $2.50.

Penicillin was the first of the antibiotics to come into very general clinical use, and with it was worked out knowledge of how to best use the continuingly improved preparations of this drug. Streptomycin soon followed in development. Now other antibiotics are being rapidly developed and brought into clinical use. The underlying principles of their use can be best understood by the physician who has learned to use effectively penicillin and streptomycin. For this and other reasons the practicing physician will profit much by reading this small book.

*Soapmaking, the Principles and Processes*, by R. L. Datta, D.Sc., Industrial Chemist, Government of Bengal, (Retired), 143 pp., General Printers and Publishers, Ltd., Calcutta.

This book constitutes the experience of the author on soapmaking extending over a long period. It deals with the fundamental principles and processes on which the manufacture of soap is based. Included are the fatty raw materials stressing their fatty acid contents, the knowledge of which is of utmost importance in soapmaking. The Hardness Number and the balance between palmitic and stearic acids in a soap charge have been formulated for the first time. These will be found sure and effective in controlling the ultimate properties of any kind of soap.

# PERFUMER'S SHELF

## Value of Carbinols and their Esters

The carbinols and their esters, says J. Pickthall (*Soap, Perf. & Cosmetics* 21:147, 1950) are synthetic aromatics with unique floral odors. In discussing the chemical and physical properties of these compounds and their potentialities in formulations he points out that, even though they have been known for many years, these materials seem to have been neglected by perfumers. It is stressed that the carbinols in general and the tertiary bodies in particular are unusual among perfumery materials. For sheer fullness of odor they are without rivals, and this property is achieved without the penetrating and definite odor of certain other chemicals. The carbinols are unique in their bloom-like fragrance and their ability to give body and character to floral bouquets. In addition they are extremely resistant to oxidation and will not discolor on exposure, which makes them of the greatest value in creams and soaps. They possess a fullness of odor which persists for a considerable period of time and most of them are effective fixatives. In the main, the carbinols are easy to use—that is, they may be used in relatively large amounts in a variety of compositions without fear of upsetting the balance of an established formula. Their high solubility in alcohol is another point in their favor.

The benzyl dimethyl, benzyl methylethyl, phenylethyl dimethyl, and the phenylethyl methylethyl carbinols may be used in almost any floral perfume. For experimental purposes the perfumer should try out his carbinols by taking simple blends of, for example, two characteristic floral notes and making additions of one of the four carbinols mentioned above. Thus, rose may be attempted from mixtures of rhodinol, ionone and carbinol. Ionone, methyl heptin carbonate and carbinol will produce an excellent base for violet. Benzyl acetate, amyl cinnamic aldehyde and carbinol will give a fine start to a jasmine perfume. For muguet the carbinol (especially the benzyl dimethyl) is added to hydroxycitronellal and rhodinol. Lilac may be based upon carbinol, terpineol and hydroxycitronellal.

However, warns Pickthall, the carbinyl esters must be treated in a vastly different manner from the carbinols. The odors of the esters are intense and characteristic and they require a gentle hand when attempting to introduce them to a compound. Unlike the carbinols it is possible to upset the balance of a perfume by adding a carbinyl ester indiscriminately. In the main it is advisable to use the esters in traces unless one attempts to produce a new type with the ester as the central odor. The tertiary carbinyl esters are of special interest on account of their ability to withstand saponification.

## Concrete Essence of Acacia Farnesiana

D. La Face (*Helv. Chim. Acta.* 33:249, 1950) found that the absolute essence of *Acacia farnesiana*, prepared from the concrete was a greenish-brown liquid of the consistency of honey and of a powerful, tenacious, and characteristic odor. The following compounds were isolated from this essence: a mixture of cresols, a mixture of ethyl phenols, butyric, palmitic, benzoic, and salicylic acids, eicosane, a hydroxyacetophenone, and a ketone of the formula of the ionones. Coumarin, benzyl alcohol, linalool, alphaterpineol, and nerolidol or farnesol (or both) were found to be present in the esterified portion.

## Bactericidal Action of Lemon-grass Oil Emulsions

The factors affecting the germicidal efficiency of commercial lemongrass samples were examined by S. M. Bose, C. N. Bhima Rao and V. Subrahmanyan (*J. Sci. & Ind. Research* 9B:12, 1950) with a view to standardizing conditions for the preparation of disinfectants. It was shown that the bactericidal efficiency of lemongrass oil is directly proportional to the citral content in it. Homogeneous dispersion of the oil and stability of the emulsion are two important factors on which its bactericidal action depends; of the emulsifying agents tried, triethanolamine oleate, potassium oleate, and rosin soap were found to be the best. The pH of emulsified disinfectants is important from the point of view of the stability of the emulsion; the variation of pH within the specific range at which the emulsion would remain stable appeared to have no influence on the bactericidal action of freshly prepared emulsions but adversely affected the bactericidal property of the emulsions on storage. No direct relation was found between the viscosity of lemongrass oil emulsions and their bactericidal action. Use of emulsifying agents and solvents in excess in the preparation of disinfectants was shown to lower the bactericidal action and the stability of the emulsions on dilution.

## Determination of Menthone in Garden Mint Oils

A detailed description of the "hot" and "cold" methods for determining menthone in garden mint oils is given by F. M. Hoffmain (*Anais. assoc. guim. Brasil* through *Chem. Abstr.* 43: 8096, 1950). The hot method is recommended because in the cold method the results are lower and the determination of menthone is believed to be incomplete.

In the hot method, 2 Gm. of oil are weighed into a 150 cc. Erlemmeyer flask, heated and, while agitated, 30 cc. hydroxylamine solution added. The latter is prepared by dissolving 40 Gm. hydroxylamine hydrochloride in 80 cc. water and diluting with 95 per cent alcohol to 800 cc., then adding 600 cc. 0.2 normal potassium hydroxide and 5 cc. of Bromophenol blue solution, and filtering. The whole is refluxed in a water bath. After one hour it is cooled and titrated with 0.5 normal hydrochloric acid until color changes to yellowish-green. Artificial light is preferable for titration. Carry out a blank test. The indicator is bromophenol blue obtained by titrating 0.1 Gm. tetrabromophenolphthalein with 3 cc. of 0.02 normal sodium hydroxide and diluting with water to 25 cc. after solution. If less than 5 cc. of hydrochloric acid are required for the titration, repeat the test using less oil or more solution. The percentage of menthone is calculated from the following formula: $[(A-B)F]/2P$, where A = cc. hydrochloric acid of blank test, B = cc. hydrochloric acid of oil test, F = molecular weight, and P = weight of the sample.

## Sense of Taste

Following a discussion of the evolution of the sense of taste, R. W. Moncrieff (*Perfumery & Essent. Oil Rec.* 41:259, 1950) points out that it is a matter of everyday experience that we taste with the tongue, and examination of this organ shows it to be covered with taste buds; these are complicated end organs of nerves. Some of these taste buds react to only one kind of taste, others react to several. They can be distinguished one from the other only by applying to them sweet, sour, etc., solutions, and observing if there is any response, *i.e.*, if a sensation of taste is perceived. The distribution of the taste buds is more widespread in the fetus, in which they appear at three months, than it is in the child, and more widespread in the child than in the adult. The child, for example, has the inside surfaces of the cheeks plentifully supplied with sweet taste buds, whereas in the adult the cheek surfaces carry no taste buds. This circumstance affords an explanation of the marked liking for sweetstuffs shown by children, and it may indicate that the young organism needs a plentiful supply of sugars.

In adult humans most of the taste buds occur on the dorsal surface of the tongue, and a relatively few on the epiglottis, and on the beginning of the gullet; they do not occur on the underside of the tongue, on the inside surfaces of the cheeks, on the lips, the tonsils, or the uvula. Even on the upper surface of the tongue, distribution is by no means uniform, and its middle area carries no taste buds. The tip of the tongue is most sensitive to sweet tastes, the edges of the tongue to sour tastes, and the back of the tongue to bitter tastes. Salt tastes are perceived over a larger area than the other tastes, but particularly they are well perceived near the tip and edges of the tongue.

It has been estimated, says Moncrieff, that there are about 9,000 taste buds in man, but this number may be an underestimate. In any case, the number of taste buds must be variable. One investigator found that one single foliate papilla could carry anything between 13 and 441 taste buds. There are usually ten or twelve of these foliate papillae and the total number of taste buds that they carried varied from 322 to 2,957 in one group of people who were examined. Another student found that taste buds reached their greatest development at puberty, and began to recede in numbers at middle age, due to regression and atrophy. The greater wealth of sweet taste buds carried by children is reflected in their ability to taste a sugar solution of 0.68 per cent, whereas elderly individuals cannot taste one lower than 1.23 per cent.

In discussing the taste nerves, Moncrieff notes that the taste buds are the receptors for taste, and when a sapid substance makes contact with them, some physico-chemical change takes place in the bud. This change has to be registered in the brain before any sensation can be experienced, and the information that some change has taken place in the receptors is transmitted to the brain by the nerve fibres. These carry an action current—a series of discrete electrical impulses—to the brain. When the taste bud is stimulated, a trigger of some sort is pulled and electrical impulses pass up the nerves to the brain. These electrical impulses are constant in amplitude, but vary in frequency. It seems almost certain, says he, that the electrical impulses which pass from taste bud to the brain are similar in nature to those passing from olfactory cleft up the olfactory nerve to the brain, and to those from the retina up the optic nerve to the brain.

Moncrieff calls attention to the brilliant work carried out by Pfaffmann in 1941, which has opened up new fields of thought with respect to the sense of taste. He connected single fibers from two of the taste nerves of a cat to an oscillograph and then applied sapid solutions to the tongue of the cat. Pfaffmann found that he could record these electrical impulses and so was able to confirm the view previously held that the passage of electrical impulses from the receptors to the brain constituted a part of the mechanism of gustation. He was able to examine the electrical currents in many different single nerve fibres, and he found that there were three kinds of fibres, characterized by the type of taste to which they would respond; these were: (1) Fibres responding only to acid, *i.e.*, sour, stimulation. (2) Fibres responding both to acid and to salt, *i.e.*, to sour or to salty stimulation. (3) Fibres responding both to acid and to quinine, *i.e.*, to sour and to bitter stimulation.

He found, too, by studying the action currents in nerve fibres which led from different parts of the tongue that the tip and the front edges of the tongue were most sensitive to sodium chloride, the base and the back edges to quinine, while all the tongue except the middle responded to acid.

Moncrieff feels that temporal patterns may also play a part on the sense of taste. Thus some substances may be tasted almost instantaneously, others only after latent periods of varying lengths of time. The time factor may be important in taste discrimination, and the ultimate picture presented to the cortex may well be one of space and of time.

## Carvone from Limonene

In a paper delivered before the Division of Industrial and Engineering Chemistry during the 118th meeting of the American Chemical Society, in Chicago, C. Bordenca, R. K. Allison and P. H. Durstine reported that *d*-limonene which constitutes about 95 per cent of orange and grapefruit oils, is potentially available in large quantities as a by-product of the citrus industry. To date, industrial utilization of limonene has been limited. Their paper presents the results of a study of the conversion of *d*-limonene to *l*-carvone to provide a substitute or partial replacement for natural oil of spearmint in which *l*-carvone occurs to the extent of about 65 per cent. In converting *d*-limonene to *l*-carvone, nitrosochlorination of limonene was carried out using liquid sulfur dioxide as a solvent. A 67 per cent yield of limonene nitrosochloride was obtained. Dehydrohalogenation of the nitrosochloride was effected by the use of urea in isopropyl alcohol solvent, the carvoxime being obtained in theoretical yield. Hydrolysis of the oxime under controlled pH conditions produced *l*-carvone in 60 per cent yields.

## Vanilla Fruit

According to a note in the *Perfumery and Essential Oil Record* (41:267, 1950) a new product, known as "Vanilla Fruit" is available to makers of vanilla extract from the Vainillera Mexicana. It is made by a curing method which produces a material of known moisture content. The beans are ground to a fineness suitable for percolation so that they may be added directly to the percolator. As the moisture content is known it is possible to keep the alcohol content of the mestrum at a predetermined value. In producing "Vanilla Fruit" the ripened beans are ground to a pulp and kept at a temperature ideal for enzymatic action. Under conventional methods beans were alternately dried and sweated for a period of about 70 days; the new technique requires less than 60 hours. After curing the pulp is artificially dehydrated rather than dried in the sun. The product is said to be free from insects and practically free from molds and yeasts.

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# ABREAST OF THE MARKETS

## ESSENTIAL OILS, BOTANICALS LEVEL OFF SLIGHTLY AS HYSTERIA BUYING LESSENS; FAR EASTERN ITEMS FORCED UP BY WAR CONDITIONS

Both the essential oil and botanical markets continued to advance quite sharply during September with a slight leveling off in the botanicals being noted during the latter part of the month. Whether this slight degree of softening had anything to do with the sudden victories in Korea is questionable. One essential oil house reported it was filling orders as fast as they came in from the consumers, and still there seemed to be plenty of material to meet the excessive demand. No allocations were in sight, no severe scarcities loomed on the horizon as yet. Apparently the initial period of scare buying which occurred in July has turned into a state of constantly expanding inventories. During the days prior to the Korean Incident, buyers were taking advantage of the gradual postwar decline in prices which followed the end of the second world war. They kept their inventories at a very low level because replacement costs declined steadily from month to month. When the Korean flare-up occurred therefore, the consumers were caught with very few stocks on hand since they had all overstayed the market. The frantic buying, then, was not so much derived from pure hysteria merely for the sake of buying as it was from the absolute need for enlarging the small inventories on hand. It soon became evident that if the so-called police action in Korea developed into a full-scale war, replacements would be very difficult to procure.

As a result, consumers rushed into the market to build up their drastically curtailed inventories. Now, in the month of October, it seems that the exorbitant demand for essential oils and botanicals has become less frantic and has been established at a more constant pace, although consumers are still buying beyond their normal requirements.

Among the essential war-time commodities, glycerine, quicksilver, and alcohol have been especially effected, with most of the glycerine moving into the defense program. The glycerine is used in lacquers for tanks and aircraft, and it is expected, in some quarters, that larger quantities will be used in the production of rocket power. Quicksilver has become very active with sellers limiting spot shipments to about five flasks to regular customers. Alcohol has become very tight, as a result of a rapidly increasing demand for the item in the production of synthetic rubber, as well as increasing demands in other war materials including rocket power.

No one, of course, knows what will develop in the months ahead in world politics and in the economic condition of the United States but two alternatives are clearly visible, which in either case will affect the botanical and essential oil markets.

As the U.N. forces are entrusted with the task of defeating and mopping up the North Korean troops in the area north of the 38th parallel, this operation could continue interminably in the event of North Korean guerilla action in a fight to the last man. Or, if Russia should choose to promote other minor wars in the Far East, the Middle East, or in Europe, one right after another, the same result would occur—the United States would be forced to maintain a large military establishment, which would mean high taxes, economic controls and scarcity of materials. Russia's intention in this case, of course, would be to drain America of her resources.

The other alternative is that Russia, seeing the determination of the United Nations to fight for the sake of peace, as in Korea, will scrap her archaic timetable of wars and resolve to sit around the peace table and settle the differences amicably.

Whichever way the tide turns in the future, the markets will be directly affected. Should the Korean war persist a long time, or should other minor wars develop, botanicals and essential oils will become hard to get, just as they were ten years ago. If, however, the international situation improves and the war ends suddenly, consumers are going to be caught with huge inventories bought at a time when prices were high and held over to a period when prices are falling off. In either case, the consumer is advised to buy wisely by maintaining an inventory of sufficient size to meet any emergency, and he is advised not to hoard.

• Prices quoted in this section were current on the first of this month.

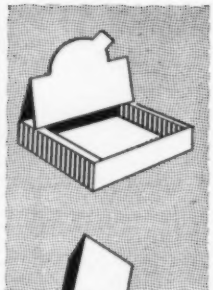
### Chinese Materials Continue Upward

With the exception of anise oil, which has been wavering in price by ten or fifteen cents during the past several months, the oils and botanicals originating in China continue to advance. *D & O News*, published by Dodge & Olcott, Inc., has attributed this condition to several factors.

Frequent interruptions have occurred in the normal flow of both the anise and cassia oils from the production centers to the British owned port of Hong Kong in Southern China. The report points out that the Chinese seem reluctant to sell their goods, anise and cassia oils, which have a definite and fixed value. Although they receive dollars in payment, paradoxically enough, this very sought-after form of currency is, nevertheless, in China tied down with government restrictions and prohibitions. In other words, the restrictive dollar, although of high value, can buy only those Chinese items which the government approves but cannot be used to purchase other items which may be of great necessity to every-day life. The anise, on the other hand, has an intrinsic value which is not curbed by government orders and prohibitions.

In the high levels of the Chinese government, on the other hand, foreign exchange in the form of dollars is greatly sought after. The government tries its best to hide this need for the dollar currency from its citizens by these devious means of restrictions. The idea behind this Oriental paradox is presumably to prove to the ordinary citizen that Communist China is completely independent of both for-

(*Continued on page 550*)



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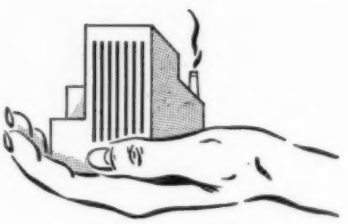

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## SYNTHETIC RUBBER PROGRAM CUTS INTO ALCOHOL SUPPLY; DEMAND FOR FRUIT CUTS LEMON OIL PRODUCTION SHARPLY

Because of the increased demand of alcohol for the production of synthetic rubber, producers have been forced to allocate their stocks to customers on the basis of previous orders. When the program is fully developed it is expected that 150 million gallons of alcohol will be used a year in the synthetic rubber program. The present production of industrial alcohol amounts to 200 million gallons a year.

Although the alcohol production is to be expanded, one source has indicated that delivery of the commodity to non-essential consumers will be markedly curtailed, if not suspended, in a month or two. Denatured No. 1 Special alcohol is now quoted from 66½c to 86½c a gallon.

The critical condition of the alcohol status was suggested earlier this month when industrial alcohol producers asked the Agriculture Department to buy a large supply of offshore molasses and allocate it to the various users. This request was made as an alternative to a previous proposal that alcohol be purchased directly from Cuba. Official opinion in government circles, however, seems to indicate that both these proposals will be turned down, the former because it is felt Cuba would boost the molasses price up too high. In the second place, feed manufacturers, who have expanded their use of blackstrap molasses since the last war, are strongly opposed to any form of allocation as far as molasses is concerned. And there is some considerable doubt that Cuba would sell such a large amount of molasses to the government, principally because the island has managed to build up its blackstrap market with the feed industry in this country. It is probably not very eager to end this arrangement.

As for the second proposal, that the United States buy the alcohol directly from Cuba, officials in the Agricultural Department are reported to be skeptical as to whether Cuba has the plant capacity to convert its entire molasses supply into alcohol.

### Lemon Oil Short

The demand for lemons, as fruit, is so great that it has cut into the production of the oil quite heavily. In both California and Italy the growers have been receiving higher prices for the fruit, with the natural result that they are shipping more lemons to the fruit industry and fewer to the oil producers. In addition they have been demanding more money for the smaller supply of lemons-for-oil. Italian growers, moreover, are now able to export lemons to the United States at a profit, and as a result are paying little attention to the oil industry.

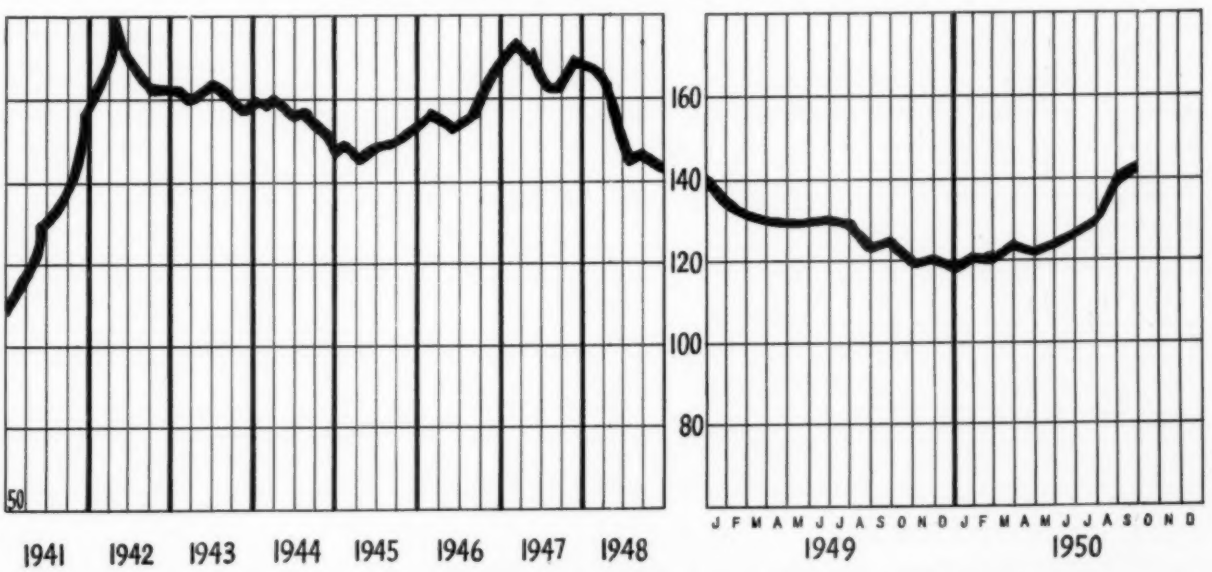
In addition, England has altered its foreign-exchange regulations, permitting larger imports of foodstuffs, including lemons. Along with this increased demand is the larger consumption which has developed in the European countries.

The California lemon oil advanced from $3.25 to $4.25 and the Italian oil, from $3.25 to $4.00. This period when lemons are in large demand for their fruit value, rather than for the oil, accentuates the fact that good fruit seasons and good oil supplies do not occur at the same time. Last year, for example, in December, January, and February during the freezing temperatures in California and Florida, close to 750,000 boxes of lemons were severely damaged by the cold weather. Immediately, this automatically made the lemons unfit for food, but a large percentage of them were sold to oil distillers who sold the lemon oil. Even then, the oil production was curtailed a little, through the freezing of immature fruit. In general, however, the loss of the fruit industry seems to be a gain for the oil industry, and vice versa.

### Lime Oil More Reasonable

The price of expressed lime oil fell off $4 in September from $12.50 down to $7.50, a decline which at first seems to be out of place in the current trend of rising costs. The explanation arises in the fact that during June of this year the lime oil price jumped up abnormally high from the level of $8.75 to that of $12.50 owing to a late arrival of the crop. During this period the oil on spot dwindled to almost nothing as the price continued to soar. It remained

**50 Raw Materials—Weighted Price Index. 1926 = 100.**




The price index of fifty commodities for September advanced slightly from 142.3 to 143.5.

## SEPTEMBER PRICE CHANGES

**UP**

Alcohol Denatured No. 1 Spec. 8c
Balsam Copaiba Para 8c
Balsam Peru 10c
Balsam Tolu 5c
Bergamot Oil 75c
Cardamom Oil $10
Cassia Oil, Redist. $1
Cedar Leaf Oil 25c
Ceresin Wax ½c
Citronella Oil, Java 20c
Clove Oil 25c
Coriander Oil 50
Cream Of Tartar 4c
Cresosote, NF 10c
Ergot 60c
Formaldehyde USP ½c
Geranium Oil, Bourbon $8
Glycerine CP 10c
Hexamethylenetetramine 2c
Ipecac Root 60c
Irish Moss 2c
Lemon Oil, Italian 75c
Lemongrass Oil 25c
Mastic Gum 30c
Mercury $7
Nutmeg Oil 20c
Orange Oil, Amer. Cold Pressed 35c Amer. Dist. 35c
Papain, Pure, Powd. 35c
Paraffin Wax 1c
Pennyroyal Oil 20c
Peppermint Oil, Redist. 25c
Petit Grain Oil, S. A. 5c
Potassium Guaiacol Sulfonate 20c
Rochelle Salt 3c
Sabadilla Seed 5c
Saccharin 10c
Sandalwood Oil 50c
Seidlitz Mixture 2c
Senega Root 10c
Silver Nucleinate 10c
Silver Proteinate 10c
Spermaceti 2c
Tartar Emetic 7c
Tartaric Acid 5c
Vanilla Beans, Mex., Whole 25c
Vetivert Oil, Bourbon $9
Wormseed Oil, 50c

**DOWN**

Anise oil 5c
Carnauba Wax No. 1 13c
North Country No. 3 10c
Dill Oil 40c
Japan Wax 6c
Lavender Oil 95c
Lime Oil, Expressed $5
Menthol, Natural $1.50
Pimento Berry Oil 40c
Pine Needle Oil 5c

at this high point throughout the summer and only now has been reduced, due to the arrival of a new crop.

In January, 1950, the oil ranged from $6.50 to $9.75, fell off to $6.25 in February, and advanced to $7.50 in March and $8.75 in April and May.

### Chinese Materials Continue Upward

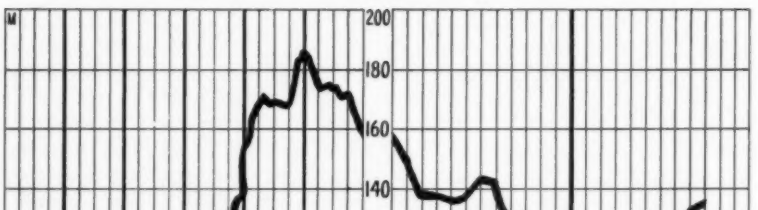
*(Continued from page 547)*

eign trade and currency and can stand on its own feet.

As a result, the Chinese government has surrounded all export and import transactions with a mass of red tape to emphasize the fact that it is in no hurry to complete these transactions. This means that shipments are sometimes held up for several days at a time.

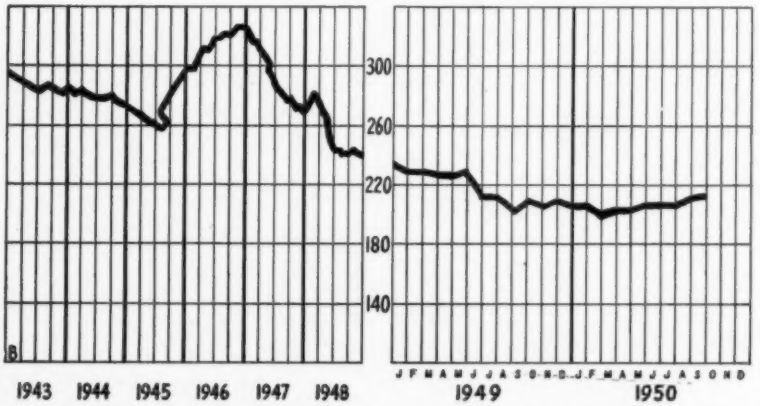
All this has produced a shipping problem and has promoted an artificial shortage due to the infrequent shipments from the Chinese port. This development, coupled with the fact that the Chinese in Hong Kong have tried to use the Korean War to their advantage by raising the prices of their commodities, has resulted in higher quotations in such items as cassia, which last month advanced $1.00 to the current price of $4.75.

**15 Medicinal Chemicals—Weighted Price Index. 1926 = 100.**




The medicinal chemicals index advanced from 132.8 to 135.8. Alcohol, cream of tartar, and mercury were higher; menthol was lower.

**15 Botanicals—Weighted Price Index. 1926 = 100.**




The botanicals index advanced from 209.6 to 211.2. Balsam tolu, ergot, and ipecac root went up.

### Menthol Declines Sharply

Although consumer interest in menthol is normally high at this time of the year, demand for the item has been quite sluggish. This development, added to the fact that apparently there are sizable quantities of menthol available in China for shipment to this market, has caused the price to fall off $150 from last month. It is now quoted in the range between $13.00 and $13.10.

A reversal in the tend is anticipated in some quarters in the months to come, when consumption becomes very heavy, especially since China is the only major source of supply at present.

### Tartaric Acid Higher

Tartaric acid advanced last month by 5c to the current level of 37c while tartar emetic went up 7c to 54c. Cream of tartar went up 4c from the previous month's figure of 28c to 32c, and Seidlitz mixture went up to 29¼c.

Additional chemicals which advanced include cresosote N.F., now priced at 95c; hexamethylenetetramine USP, 40½c, saccharine, $1.60 to $1.70; and formaldehyde, USP, 4c to 10c a pound.

### Vanilla Beans Tight

Mexican whole vanilla beans advanced 25c to $7.25 during last month, with the supply becoming nominal. According to some reports, the new crop of Mexican beans will amount to somewhere between 150,000 and 250,000 pounds, as against 100,000 pounds last year. The normal vanilla-bean crop in Mexico ranges between 300,000 and 350,000 pounds.

Bourbon vanilla beans remained at $4 and Mexican cut beans, at $6.50. Few offerings have been made to dealers in the United States by French shippers, mainly because the dealers in Marseille have refused to pay the shipment prices set at the origin in Madagascar.

### Bergamot Oil Becomes Scarce

The advance of 75c during last month for Bergamot oil to the level of $6.25 has been attributed to the Consortium in Italy which has allocated much of the oil to other countries, leaving a very small supply for the United States. The upper range extended to $7.00, the highest price since the end of World War II.

### Camphor Production, Japan

Production of crude camphor in Japan in the first five months of 1950 totaled 676 metric tons, a monthly average of 135 tons. Average monthly production was 105 tons in 1949 and 132 tons in 1948.

Refined camphor output, according to official Japanese statistics, for the January-May period of 1950 was 135 tons, or 27 per month. Comparable monthly average rates were 58 tons for 1949 and 51 for 1948.

### Senna Getting Scarce

Recent cables from India tend to show that very little senna remains at the origin. Additional reports from sources in the trade indicate also that dealers in India are reneging on orders and selling to the highest bidders.

### Formosa Citronella Oil

Approximately 2,626,000 pounds of citronella oil are expected to be produced from 15,000 hectares in the Hinschu area of Formosa. It is estimated that this production will earn $3,600,000, United States currency foreign exchange. (1 hectare equals 24.71 acres).

### Formosa Essential Oil Exports

Exports of essential oils to the United States from Formosa in June 1950, consisted of 54,000 pounds of citronella oil to a value of $65,704 and 5,250 pounds of camphor oil valued at $5,081.

Floor prices for citronella oil for export to the United States were tentatively set in August at $1.25 a pound c.i.f. Japan, or $1.12 f.o.b., Keelung or Kaohsiung.

### Guatemala Essential Oils

It is estimated that Guatemala will produce 1,000,000 pounds of citronella, Java type, in 1950, compared with 750,000 pounds in 1949.

Lemongrass oil production in 1950 is expected to reach 200,000 pounds, an increase of 50,000 pounds over the 1949 output.

### Carnauba Wax Over-stocked

Carnauba wax declined 13c during the past month, principally because the flurry of buying during the month of August has ended. It stands to reason that buyers overstocked during this time and now find it unnecessary to increase their supplies. The price of the wax stands in the range between $1.05 and $1.07. The North Country No. 3 carnauba wax followed suit with a corresponding decline of 10c and is quoted between 82c and 84c.

### Glycerine Up 10c

The price of glycerine advanced 10c during September, from 35¼c to the current quotation of 45¼c. Shortages are becoming more acute, and it is reported that the production of many of those products which contain glycerine has been cut down measurably.

The report that Russia is prepared to sell 1,000 tons of glycerine, a strategic war material, to the United States for shipment this month, aroused considerable speculation in some quarters earlier in the month. The question was whether this development had any bearing on Russia's international political intentions and whether it meant that this country has no immediate global war plans.

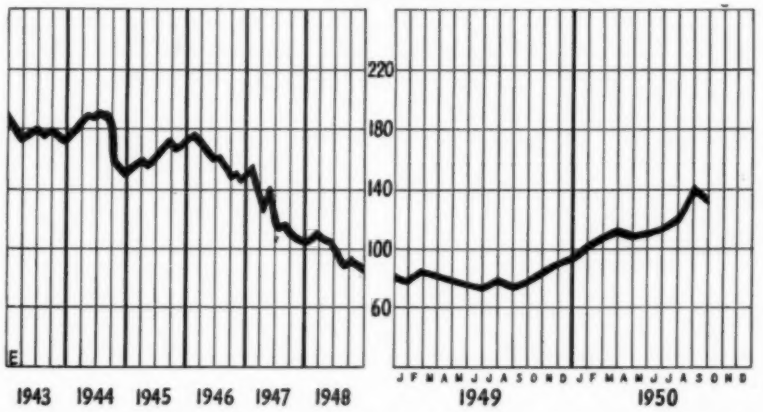
Major glycerine refiners report that all the refined glycerine produced is bought up without hesitation. The production of synthetic material, whose capacity is about 3,000,000 pounds a month, is going directly into consumption.

Refiners are refusing to purchase crude material from the outside, as reported last month, and are depending almost entirely on their own production of crude.

### Dandelion Root Very Scarce

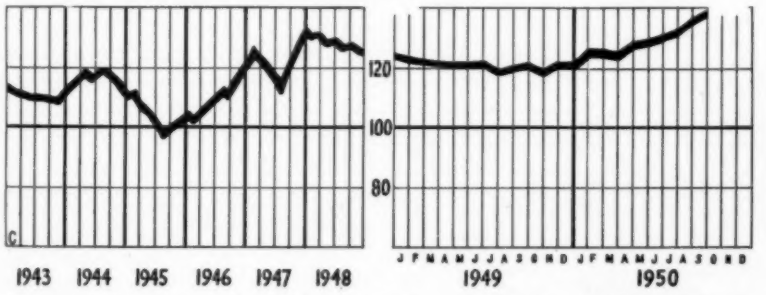
Although there have been no price advances in dandelion root as yet, the item is very scare from Central Europe. It is said that some lots have managed to come through from this source, but even then it takes almost a year for the transaction to be completed from order to delivery. In some cases the deliveries are rejected due to spoilage or inferior quality.

**15 Essential Oils—Weighted Price Index. 1926 = 100.**




The essential oils index declined slightly from 140.9 to 138.7. Bergamot, cassia, clove, lemon, and sandalwood oils went up; anise oil, lavender oil and lime oil went down.

**25 Cosmetic Raw Materials—Unweighted Price Index. 1926 = 100.**




The cosmetic raw materials index went up from 136.8 to 139.4. Alcohol, balsam copaiba, balsam peru, balsam tolu, ceresin wax, glycerine, paraffin, and sperm-aceti were higher; Japan wax and menthol were lower.

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## Prescription Renewals

*(Continued from page 477)*

"1. This request for a hearing is put forward, not in a hostile, but in a friendly, spirit. The American Pharmaceutical Association is a professional, not a trade or industrial, association. Pharmacy, going back to the apothecary of old, ranks among the most ancient of our professions. Its exact training and its demand for competence on the part of its practitioners goes back to the Middle Ages. Its code of ethics since time immemorial has made the profession of pharmacy an instrument of the public health. In medical practice the pharmacist's office is second only to that of the physician; in fact the success of the physician's ministrations depends upon the complete integrity with which the pharmacist does his work. There is no need here to remind you of the support which the Association and its members have given to the Food, Drug and Cosmetic Act, and of their cooperation at all times with the officials in charge in an endeavor to make the administration of that Act a success. This, their first formal protest, is prompted by a genuine conviction that, in respect to the refill of prescriptions, the Food and Drug Administration is usurping a power not given to it by the Act; that it seems to be giving effect to a policy which it has not formulated into a directive or a regulation; and that, as matters now stand, there is no authoritative statement to guide pharmacists in the practice of their profession. Let us be specific.

"2. The Food, Drug and Cosmetic Act—which we shall hereafter refer to as the Act—is a code of law applicable within the domain of commerce among the several states which, in the dispensing of drugs and medicines, aims to protect the public health. Section 502 of the Act, especially sub-sections (b), (c), and (e), contains provisions designed to secure the accurate labeling of all dispensed drugs. Section 503 (b) is concerned with prescriptions issued by licensed physicians and sets down the conditions upon which such medicines, dispensed at the prescription counter, shall be exempt from the requirement of Section 502 in respect to labeling. In plain and unmistakable language it recites that labels stating ingredients, amounts and like information are not required if the physicians issuing the prescriptions are properly licensed to administer such drugs and if the drugs dispensed bear labels containing the name and place of business of the dispenser, the serial number and date of such prescription, and the name of the prescribing physician. Such is the exemption from the requirements of Section 502 (b) and (e). If, however, the drug belongs within a class which falls under the prohibitions of Section 502 (d), the exception applies only to the original filling of the prescription; it does not apply in case such prescription is marked by the writer thereof as not refillable or its refilling is prohibited by law. The Congress, in enacting Section 503 (b) had in mind the custom which prevails in the medical professions in respect to refilling; the Congress is presumed to intend the plain meaning of its words.

In respect to prescriptions marked "not to be refilled" or those where refilling is prohibited by law, the Congress formally withdrew from the refill the exemption privilege. In respect to ordinary prescriptions, not containing prescribed drugs, the Congress made no such withdrawal of the exemption. The meaning of the statutory language is beyond peradventure.

"3. Yet, in disregard of the accepted principles of statutory interpretation, the Food and Drug Administration has formulated—and has moved to put into effect—an "interpretation" by which the exemption from labeling granted by Section 503 (b) is withdrawn from all refill prescriptions. Thus, in a widely circulated address before the National Association of Retail Druggists, Commissioner Paul B. Dunbar insisted that no prescription should be refilled except by the will and purpose of the prescribing physician, which must be attested in writing. In supplement thereof, Mr. Edgar A. Reed, an official of the Food and Drug Administration, in an article entitled "Refilled Prescription Cases," reiterates that a prescription is a single order and is not to be refilled. Even as mere expressions of personal views, such utterances from high officials have something of a mandatory quality with pharmacists in general and are taken for something more than unofficial interpretation of the law. But in a number of ways and by diverse means—for which there is no space here but which the Association is prepared to present at a formal hearing—the Food and Drug Administration has caused it to be generally known that the statements of Dr. Dunbar and Mr. Reed represent its official view.

"4. It is true that as yet these views have found expression in no official directive or regulation. It is also true that as yet no proceeding has been instituted against a pharmacist for the refill of an ordinary prescription. In fact, evidence gathered by the Association indicates that the Food and Drug Administration is attempting to secure conformity of the profession to the unoffical views of Dr. Dunbar and Mr. Reed without recourse to a formal mandate. Evidence of a gradual trespass upon territory which the law has given it no authority to enter is the appearance in the list of violations of a new classification, namely 'barbiturates sold . . . and original prescriptions refilled without physicians' orders.' The grouping together of the two unlike things —the doing of an unlawful thing and the doing of an act innocent in the eyes of the law—is eloquent testimony to the attempt of the Administration to usurp power, indirectly.

"As a result of this trespass, a state of confusion has been created in the profession. The pharmacist knows that the views of Dr. Dunbar and Mr. Reed are not a correct interpretation of the law. He knows that they run directly contrary to the usages of the profession from time immemorial. He is no lawyer; yet he knows that, in the discharge of his public office, he is entitled to a clear-cut statement of his rights and responsibilities. He knows he is not getting it; and, in its absence, he is disposed to play safe. So an enormous amount of mis-


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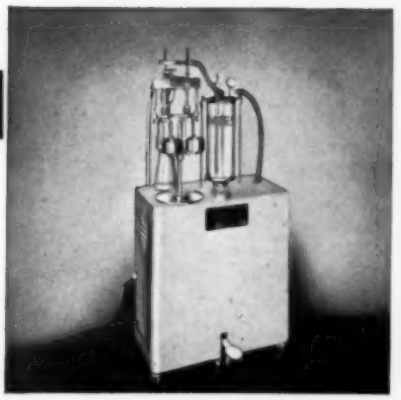

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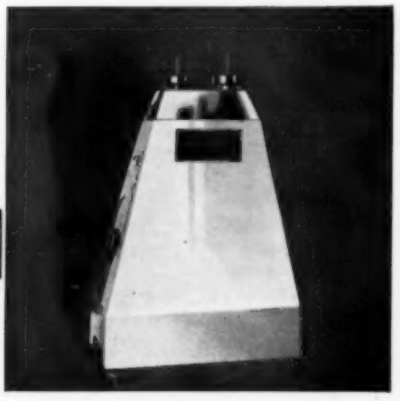

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chief is resulting from a policy, which bears the appearance of being official, yet has never been put into the form of a mandate. Patients are being denied refills of ordinary and harmless prescriptions; physicians are being disturbed by useless visits and telephone calls. The ancient liberties of the profession of pharmacy are being abridged without resort to anything even approaching due process of law. The pharmacist, under hazard of prosecution, must live up to what officials—who will not put their interpretation into the form of an order or directive—insist is the meaning of the law.

"5. We are persuaded that the interpretation of Section 503 (b) now rapidly becoming official is not the law. We are persuaded that the views of Dr. Dunbar and Mr. Reed derive no sanction or support from the Act. We are persuaded that their logic is wrong, their analysis faulty, their reasons not valid. But this letter is not the place to argue these matters. These differences can be resolved, and the issues here presented clarified, only in a hearing open to all parties in interest and only through a searching inquiry. It hardly needs arguing that the Administrator of the Federal Security Agency has the authority to call such a hearing, at which he himself or his designated deputy will preside. He is endowed with all the power necessary and proper to the administration of his supervisory office. Hearings are habitually held in respect to matters of less consequence to the interests involved and to the public. Nor is it necessary to argue the right of an ancient profession, whose liberties are being irresponsibly invaded, to a hearing and to a definition of the rights and obligations of its members. The vital interest of the public in the refill of ordinary prescriptions, which contain no drugs which fall under the prohibitoin of the law, does not need to be pointed out.

"6. Here is no mere routine administrative matter. For the Food and Drug Administration to overrule the will of the Congress, and to outlaw the refilling of prescriptions which contain no outlawed drug, is a serious matter. Even if the Administration had the power to issue such a mandate, it should act only after careful inquiry and in the light of the probable consequences of its act—a matter which has been little explored. This is no place to resolve prescriptions into their secret clauses and to determine the effect of such a mandate upon each. But, to cite obvious examples, why should the refill of a prescription designed to compensate for a constant deficiency be denied? Or why should the relation of doctor and patient be disturbed when a medicine is to be taken upon the recurrence of a contingency under instructions which are perfectly clear? In fact, the great mass of ordinary prescriptions can do little, if any, harm. To forbid refills is to vex doctors with unnecessary phone calls, to force upon the high cost of medical care the extra expense for unneeded visits to doctors. It will for a certainty lead to a substantial shift from physicians' prescriptions to over-the-counter sales. These and a series of like consequences need to be explored in detail before any mandate is issued—and officials should not state 'the

law' in advance of—or in the absence of—its definition.

"7. The hearing may, or may not, be called to take testimony in respect to a propsoed order, directive, or interpretation. It may be advisable to call the hearing for the purpose of objectively and thoroughly inquiring into the whole issue of refills. Such a call would be the best of evidence that the Administration is approaching the issue with an open mind. In case it is deemed a necessary formality, we enclose a copy of a proposed interpretation which should serve as a basis for discussion. It is written in simple language easily understood by persons not versed in the law. It does little more than translate into easier language what is already plainly written in Section 503 (b).

"We need hardly add that the American Pharmaceutical Association is as much concerned as any member of your official family in suppressing all unauthorized sales of drugs which carry a threat to the public health. Here it will in the future, as it has done in the past, give full support to every effort of the Food and Drug Administration to stop such traffic and to have the penalties of the law visited upon those who transgress its commands.

"A word in conclusion. The rights for which we here contend rest upon a foundation far more ancient, and are secured by a document far more authoritative, than the Food, Drug and Cosmetic Act itself. If your procedure requires it, we will be glad to convert this rather informal demand for a hearing into a formal motion. But we much prefer that you, as the Administrator, issue the call for the hearing on your own initiative. Such a move is more in keeping with the close and informal relationship which for many years has existed between your Agency and the American Pharmaceutical Association."

Docket Number.....

Re: the Refill of Physicians' Prescriptions

Order, interpreting Section 503 (b) of the Food, Drug and Cosmetic Act.

By virtue of the authority vested in the Federal Security Administration by the provisions of the Food, Drug and Cosmetic Act, and upon the basis of substantial evidence received at the hearing duly held pursuant to the notice published in the Federal Register on September , 1950, (....F.R.....), and upon consideration of all the matters submitted at that hearing, it is ordered:

I. That Section 503(b) of the Food, Drug and Cosmetic Act, is to be interpreted as follows:

1. No prescription can lawfully be refilled,

(a) if it is marked by the issuing physician, dentist or veterinarian as not to be refilled; or

(b) if it contains a drug or drugs which fall under the prohibition of Section 502(d) of the Food, Drug and Cosmetic Act, unless the drug is "a preparation of limited narcotic content," as defined in Section 2551 of Title 26, United States Code (the Harrison Anti-Narcotic Act) or the amount of the drug or drugs in a preparation thereof is insufficient to class it as habit-forming, as determined by the Administrator.


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2. Any other prescription of a physician can lawfully be refilled,

(a) if the issuing physician, dentist or veterinarian is authorized by law to administer such a drug, and

(b) if such a prescription when refilled bears a label containing the name and place of business of the dispenser, the serial number and date of such prescription, and the name of such physician, dentist or veterinarian.

II. This interpretation is in strict accord with the intent of the Congress, the plain and unmistakable meaning of Section 503(b) of the statute in question, and the ancient usages of the medical and pharmaceutical professions.

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## Khellin

(*Continued from page 481*)

As indicated in a recent review,[12] khellin causes relaxation of all the smooth muscles so far tested; including the intestines, uterus, bile ducts, ureters, bronchial musculature, and blood vessels. Apparently the drug works by direct action on the muscle itself. The minimal active concentration was found to be in the order of 1:2,000,000.

Bagouri[8] has observed that the systemic blood vessels are considerably less sensitive to khellin than are the coronary blood vessels. The pharmacological investigations of Fellows and his associates[13,14] have provided considerable information concerning the effect of the drug on the coronaries. In their first group of animal experiments, tests were made with khellin in a concentration of 1:100,000. This concentration produced an increase in coronary flow of 32 per cent. When the concentration was increased to 1:10,000, coronary flow was increased by as much as 67 per cent.

In another series of experiments on animals, in eight out of eleven tests 2, 3 and 5 milligrams per kilogram of khellin introduced into a vein produced a significant increase in coronary flow. After 2 milligrams per kilogram khellin caused an increase of 20 to 88 per cent for 2 to 20 minutes; after 3 milligrams per kilogram an increase of 49 to 100 per cent for 28 minutes to one hour. Doses of 5 milligrams per kilogram produced an increase of 75 to 230 per cent. In these experiments coronary flow remained significantly elevated for periods up to two and one-half hours. In all experiments, khellin produced a moderate fall in blood pressure which returned to normal in two to four minutes. Myocardiographic studies on dogs demonstrated that the cardiac depressant action of khellin was quite insignificant.

On the basis of such data, Fellows was able to state that khellin is an outstanding substance in that it produces a very long coronary dilating action. This, he felt, warranted clinical investigation in the treatment of angina pectoris because no other drug, including aminophyllin and nitroglycerine, approaches it insofar as duration of action is concerned.

Also significant is the concise statement made by Rosenman and his colleagues.[15] Using the A.M.A.'s

generic name, they noted that "Visammin has been found to be a powerful coronary vasodilator in animals, causing definite increase in coronary blood flow without demonstrable ill effect on the myocardium. It is further characterized by the absence of development of tolerance, by a wide margin of therapeutic safety and by prolonged activity, since its gradual disappearance from blood and tissues results in cumulative effects."

Other pharmacological observations should also be mentioned, since they point to the potentialities of khellin as an agent for treating conditions other than cardiac disorders. Thus, the Egyptian investigators[1] found khellin causes a conspicuous relaxation of the bronchi in isolated lung preparations and a dimunition of intestinal tone in the whole animal. Also indicative was the finding by Killam and Fellows[13] that, when khellin was administered orally to guinea pigs, the drug inhibited the bronchoconstrictor action of aerosolized histamine in 82 per cent of the animals.

As was previously indicated, khellin has a wide margin of safety when administered in therapeutic doses. Like many other valuable drugs, however, it is capable of producing certain undesired effects. As noted by one group of workers,[15] the clinical value of the drug is limited by the high incidence of unpleasant side actions such as insomnia, somnolence, light headedness, dizziness, urticaria, constipation and, especially, nausea. It was noted that the incidence of these reactions seemed to increase with larger and repeated doses: this being attributable to the cumulative effect. It is uncertain whether these side effects are due to the active substance itself or to the impurities found in the currently available materials. This, it is pointed out, is a question that will be answered only when the impurities are eliminated.

In the clinical studies reported by Armbrust and Levine,[16] the most common and troublesome side reactions were anorexia, nausea and dizziness. Except where they caused discontinuance of medication, the development of these side effects did not seem to influence the response of the patient to the drug. Most of the patients who experienced side reactions were able to continue medication at the same or reduced dosage.

It has been found that side reactions, particularly nausea, can be eliminated by careful control of the dosage.[12] Taking cognizance of the fact that khellin may cause gastric distress, one manufacturer aims to prevent this effect by providing the drug in enteric-coated tablets.

Khellin may be administered orally as a liquid or in tablets or by intramuscular injection. As remarked in a recent clinical report,[15] it has been suggested that because of the bitter taste of liquid preparations, khellin ordinarily should be given in tablet form. In severe cases of angina or asthma—the major indications for the drug—initial doses may be given intramuscularly and then followed by tablet preparations. The average oral dose is 100 to 300 milligrams daily.

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factors. The first is a process called khellinization. The second is the appearance of side effects. As already noted, khellin has a cumulative effect, as is also the case with digitalis. Khellinization, or accumulation of khellin to the desired level, is generally obtained in three to seven days. In cases where untoward effects develop early, it is an indication that khellenization at a lower dosage is needed. After khellinization has produced a systemic concentration at a therapeutic level, a maintenance dose should be determined for each patient individually.[12]

Clinical evidence shows that the main indication for khellin is in the treatment of angina pectoris, a condition characterized by pain over the heart area, usually associated with effort. The anginal pain is caused by a lack of oxygen in the heart muscle. Khellin and other drugs of the coronary dilator class increase the flow of blood to the heart muscle, thereby increasing the supply of oxygen.

Not only is khellin a valuable addition to the group of drugs used for treating angina pectoris, but in some respects is superior to the coronary vasodilators commonly administered for this purpose. For example, Anrep and his associates[2] found that, in comparison with aminophyllin, the action of khellin is more prolonged. Moreover, dose for dose, khellin is more potent than aminophyllin; experimental evidence showing that the effect of khellin on the coronary blood vessels is about four times stronger than that of aminophyllin.

In England, Dewar and Grimson[17] made a comparison of the effect of khellin and nitroglycerine (glyceryl trinitrate) on a group of patients with angina of effort; observations being made on the pain and on the changes in the electrocardiograms. From their findings it was concluded that khellin is an effective drug, but less so than nitroglycerine. They stressed, however, that khellin has a more prolonged action. They also reported that khellin in effective doses did not cause unpleasant side effects. Moreover, it provided relief in one patient who was intolerant of both nitroglycerine and aminophyllin.

The advantage of more prolonged action was also indicated in the work reported by Wigrea.[4] In animal tests, it was shown that khellin retains its effect up to six hours after administration, as compared with only a few minutes for nitroglycerine. This means that khellin may be used as a prophylactic to diminish the frequency and severity of anginal attacks.

Clinical evidence of the value of khellin in patients with angina pectoris is growing steadily. In the work[1-3] done in Egyptian hospitals, khellin was used either as a continuous treatment to prevent or diminish the number of attacks or, occasionally, for the relief of the actual attacks. Altogether 250 patients with angina pectoris were treated with khellin with distinct improvement in 140 cases, with moderate improvement in 85 cases, and with no effect in 25 cases.

Other clinicians, both in England and in this country, have made contributions to the literature on khellin. Thus, in 1948, Ayad[18] found that with the use of khellin

anginal attacks were completely abolished in 14 of 23 patients, while decided improvement was noted in another five. Later, Osher and Katz[19] reported that 16 out of 19 angina pectoris cases obtained both objective and subjective improvement with khellin medication. The anginal attacks diminished in frequency and severity and there was a corresponding increase in exercise tolerance.

In the carefully controlled clinical studies made by Rosenman and his coworkers, 14 patients with angina pectoris were treated with khellin in doses of 100 to 200 milligrams orally each day. In these sufferers, a good response was obtained in eleven, moderate improvement in one and no effect in two. In the ambulatory cases studied by Armbrust and Levine,[16] the dose generally consisted of 40 milligrams of the drug, three times per day. In one group of 28 patients, 16 said that they experienced fewer episodes of pain and that the attacks that did occur were milder than before treatment. In a second group, 13 of 25 patients stated that the drug was helpful because it reduced some of the pain and caused a reduction in the number of nitroglycerine tablets needed.

Khellin may also be of value in the treatment of other cardiac conditions. It has been tried,[2] for example, in the therapy of coronary thrombosis: The object in these instances was to provide the heart with a coronary vasodilator which does not lower the blood pressure or affect the heart muscle. It was hoped that khellin medication would thus favor improvement in the collateral circulation and relieve any associated anginal symptoms. However, there was not much difference in the mortality rate of a group of 50 patients with coronary thrombosis who received khellin, as compared with another group of 50 patients given other coronary vasodilator drugs. In the control group, 14 patients died, while 12 died in the khellin-treated group.

More encouraging is Wegria's[4] statement that khellin has been found promising as a means of treating coronary sclerosis. Also encouraging is a clinical report[15] in which each of eight patients with cor pulmonale showed distinct improvement of symptoms following the daily oral administration of 100 to 300 milligrams of the drug.

Severe bronchial asthma may be another important indication for khellin. As already noted, pharmacological data pointing to such uses has been gathered by various research groups.[1-13] In 1947, a team of investigators[20] found that khellin provides a more lasting though less prompt action than either epinephrine or ephedrine in the relief of bronchial asthma. Since the drug was also found experimentally to dilate the respiratory passages, it was tested in cases of severe bronchial asthma. Prolonged and complete relief was obtained in 41 out of 45 cases following intramuscular injections of the drug. It was also found that khellin relieved attacks in several individuals who were resistant to epinephrine or aminophyllin. Subsequently, in a study covering 138 cases of bronchial asthma, it was reported[21] that 102 patients were completely relieved by khellin


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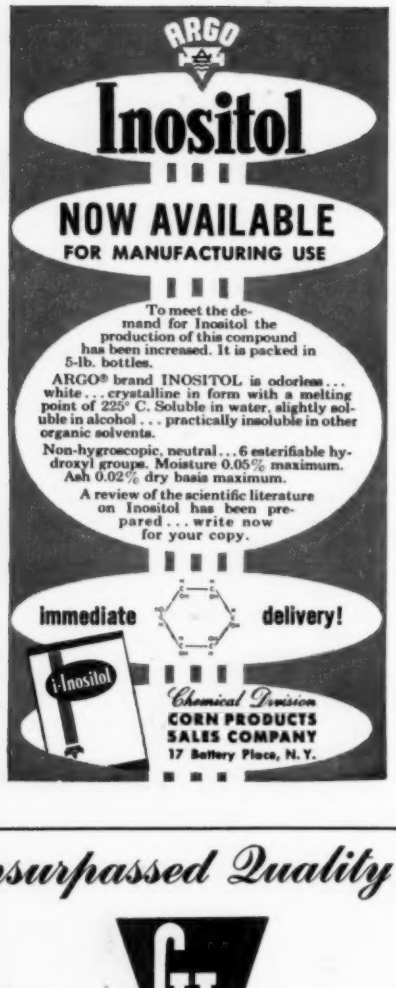
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given by injection and by mouth. Of the remainder, 24 were partially relieved and 12 were not benefited at all.

In Major's[22] series of twelve cases of severe bronchial asthma, all but one experienced great relief from the use of khellin. Similar good results were not obtained, however, by Rosenman and his associates.[15] They found that single intramuscular injections of khellin resulted in significant improvement in nine of 21 patients with acute bronchial asthma. The response was prompt, occurring within five or ten minutes. The effect was often dramatic but usually short-lived. This last, of course, is in contrast to the findings of the earlier workers,[20,21] who obtained more lasting effects.

That the value of khellin may extend to other disorders is indicated by various reports in the medical and pharmacological literature. Khalil and Safivat,[23] for example, used khellin in the treatment of children with whooping cough. The number of paroxysms and their intensity and duration were rapidly reduced by the oral administration of the drug. As a result, there was a general improvement in the condition of the patient, especially as regards sleep and appetite.

Mention should also be made of the fact that it is common practice in Egypt to administer khellin for relaxing the ureteral muscles and promoting passage of small stones through the ureters.[12] Of kindred interest is the statement by Anrep and his associates[2] that their experimental findings point to the possibility that khellin may have uses in the treatment of gastrointestinal spasm and also the spasm accompanying gastroduodenal ulceration.

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## NWDA Meeting

(*Continued from page 485*)

saler can think only of his own situation. The time has passed when the retailer, too, can disregard the problems of the manufacturer and those of the wholesaler. The time has passed when any of us can fail to consider the entire problem of the industry in its service to the one hundred and fifty million people of this country. Nor can the industry itself ignore the part that medical

science and professional pharmacy and related sciences play in our industry operations, or vice versa. The need is here now for all of us as individuals to develop this statesman-like approach towards our own problems as well as those of the entire country.

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T. A. Lambert, of San Antonio Drug Co., San Antonio, Texas, was elected president of the Association for the coming year. Other officers elected are: First Vice-president, Fred B. Kienzle, McKesson & Robbins, Sacremento, Calif.; Second Vice-president, Henry B. Fairchild, Hazeltine & Perkins Drug Co., Grand Rapids; Third Vice-President, John H. McMaster, McKesson & Robbins, Columbia, S. C.; Fourth Vice-president, G. Gilmer Minor, Jr., Owens & Minor Drug Co., Richmond, Va.; Fifth Vice-president, E. C. Porter, McKesson & Robbins, Memphis; Board of Control (3 year terms), Howard J. Bolton, McKesson & Robbins, Detroit; Evarts C. Fox, Fox-Vliet Drug Co., Pueblo, Calif.; H. C. Starling, W. H. King Drug Co., Raleigh, N. C.; W. W. Walker, Walker Drug Co., Birmingham, Ala.; Executive Secretary, E. Allen Newcomb.

The 1951 meeting is to be held at the Shamrock Hotel, Houston, Texas, October 13 to 18.

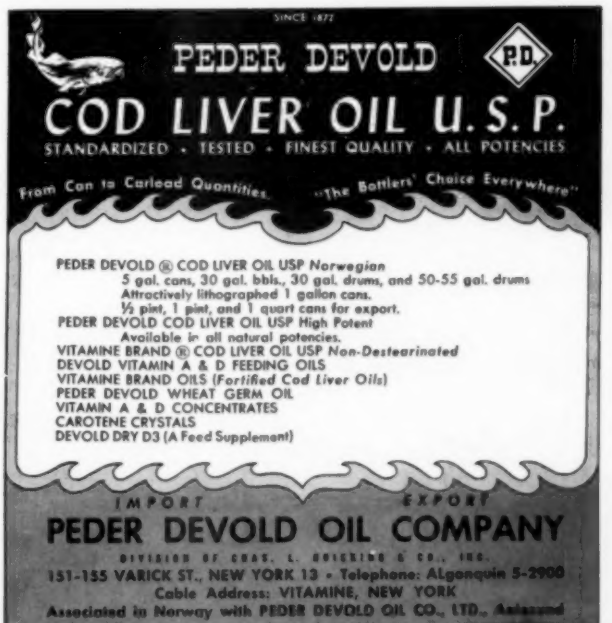
## The Antibiotics Market

*(Continued from page 473)*

apparently is using more parenteral penicillin in the office than he ever did—is almost counterbalanced by the decline in home administration. There is the feeling, therefore, that the growing popularity and use of the new wide-range antibiotics such as Terramycin, Aureomycin and Chloromycetin is responsible for the shift—or change of ratio in antibiotics used from hospital and office to home administration—prescriptions!

You will remember that we mentioned in the case of treating pneumonia where only relatively a few years ago (14-15 years ago), the average number of days a pneumonia case was hospitalized was a little over 19 and, of course, today many, many people come down with pneumonia on a Monday, are treated with one of the newest wide-range antibiotics like Terramycin, and by Friday or Saturday, are calling on the telephone again—ordering more stamps, ice cream, ginger ale, and so forth, without ever having left their home. You might well suspect that in the face of these rising sales figures for the newer wide-range antibiotics that perhaps the sales level and usage level of older forms of antibiotics such as penicillin, and streptomycin, would now begin to taper off or go into decline.

The very opposite is the case. A very significant gain in the penicillin produced and penicillin used has been noted month by month, every year, up to and including 1950 and the estimates are that 1950 will far surpass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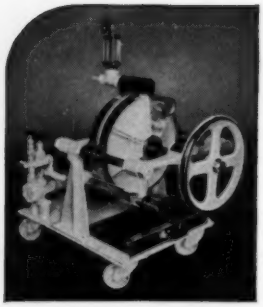

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1949, in units of penicillin produced and used. The antibiotic market is truly growing tremendously. Antibiotics unquestionably represent the most important single factor in the current development of the ethical drug industry. For example, before 1945 ethical drug sales followed nearly to a "T" the curve of national disposable income, as did most drug store sales, but since 1946 ethical drug sales have advanced 71 per cent in comparison with an advance of only 27 per cent in disposable income.

Good health and its counterparts, retail pharmacy, the ethical drug and the new and growing antibiotic industries have now become and will remain big business.

Dr. Fishbein, former editor of the J. A. M. A. describes the progress of our industry in the following way:

"Twenty-five years ago the drug industry and the medical fraternity felt that much was accomplished if there was one new major discovery in drug research in 25 years. Fifteen years ago, the pace of such discoveries had stepped up to one new major discovery in a decade. Today, we have cause to expect a new one nearly every 6 months! The pace will increase even faster in the future. It is my opinion that a few years hence, with the wider spread of health care and the increased productivity in new research medicines, the drug industry may easily be the number one industry in dollars, in the United States."

## Shaving Creams

*(Continued from page 483)*

have also been made for lanolin as an agency to soften the skin and therefore keep it from feeling harsh to the touch after shaving. Lecithin also is in use as an emulsifying agent coupled with its claimed ability to soften the skin because of its use.

From the standpoint of actual formulation of shaving creams, and principally the brushless type synthetic stabilizers are in rather common use. Glyceroyl mono stearate or similar esters such as propylene glycol stearate have been incorporated to enhance the stability of the preparation particularly to keep the consistency the same over a wide temperature range. Mineral oil is in fairly common use as a means towards mitigating against the drying effects of soap itself, and to aid in the ease of application of the cream. Gums such as the alginates and carragheenates are also being used to stabilize the emulsion. The soap used as emulsifiers may also be varied, since borax and triethanolamine are being used.

Studies made of conditions which influence easy shaving all arrive at the conclusion that the most important consideration is the length of time the pre-shaving preparation, cream or otherwise is in contact with the beard before shaving begins. The beard wetting potentialities of creams, though excellent, are not instantaneous in their activity, and a minimum contact period of 2.5 minutes is therefore recommended. From personal experience it would seem to me that this fact

is perhaps the greatest source of complaints regarding shaving. I am sure that if anyone has overslept, which appears to be a common failing, he will not consume the 2½ or more minutes in treating his face before shaving, but rather apply in a hurry and possibly inadequately and then start shaving. It would therefore appear that improvements in pre-shave preparations would be towards lessening this time and that developments of faster acting wetting agents would be necessary.

Reference was made at the start of this article to the utilization of propellants in conjunction with shaving preparations. The advantages apparent in such preparations lie in their ease of application. In their case the lather has been performed and may be easily applied which cuts down on the time needed to work a lather up. In addition, the later should be uniform and would not contain as sometimes happens a small lump of cream which has not been properly mixed with water. On purely theoretical grounds it would also appear that wetting of the beard would be faster since the lather consists of small bubbles, which would present a greater total surface of wetting agent to the beard than would a cream or other agency. My own experience with these products is limited to the barber shop, but it seemed to me that there was not nearly as much before-shaving preparation with them than there used to be when a soap was used. The final verdict of course will come from the consumer and since these products are so recent in their availability there is as yet no factor by which their efficacy could be measured. Under any circumstances it is an interesting innovation and well worth watching.

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## Private Label Cosmetics

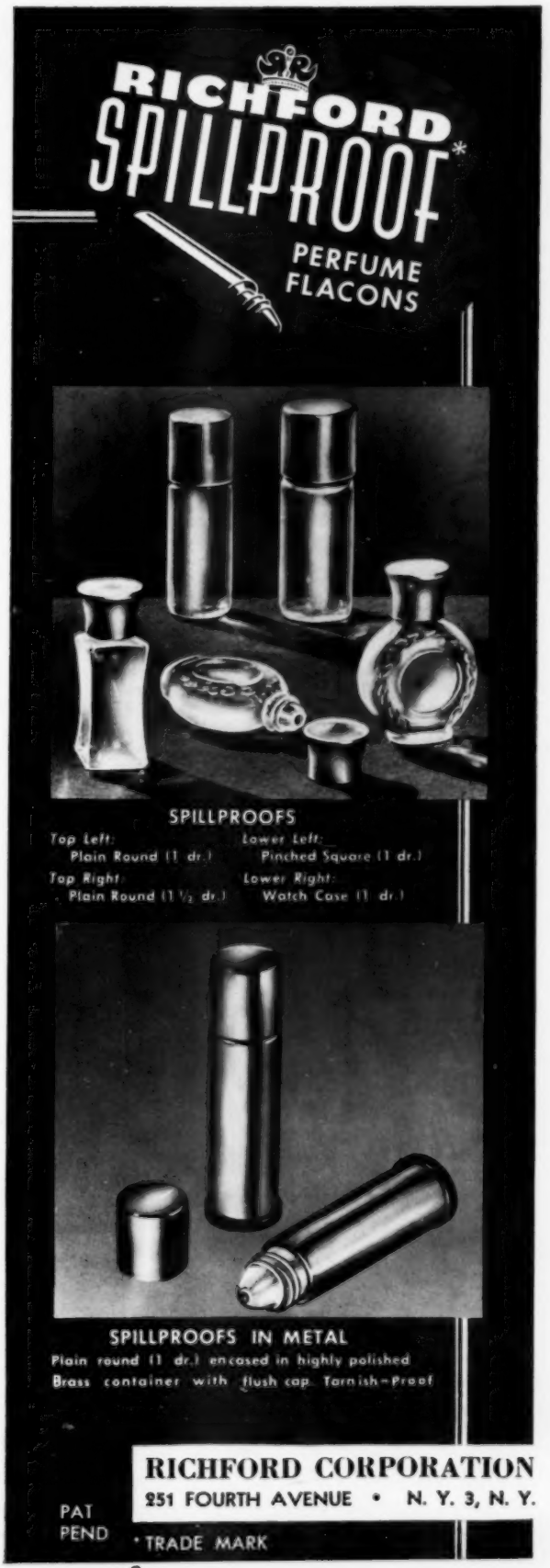
*(Continued from page 479)*

a manufacturer cannot take fair weather figures and not add the cost of supervision—space—light, heat, power—insurance, and other items. There is never a question about the price they pay a private label concern, but there most certainly is a question if they make it themselves, as any manufacturer realizes, in spoiled batches and other contingencies.

Research is unquestionably a most important factor. One private label concern has seven chemists conducting research on lipsticks alone, beside other raw material and control chemists and production engineers.

Private label manufacturers know that one of the most basic tenets of their creed is to keep formulae inviolate—that is the foundation of their existence. One private label concern has over forty different lipstick formulae which they created specifically to suit large accounts. Many of these formulae are given exclusively to certain accounts.

The statement has been made: "If we made our own lipsticks and other make-up items, we could control them." That is possible, but for how long before they would be duplicated by some one—either a competitor or a private label concern? As a matter of fact, private label concerns have been known to retain

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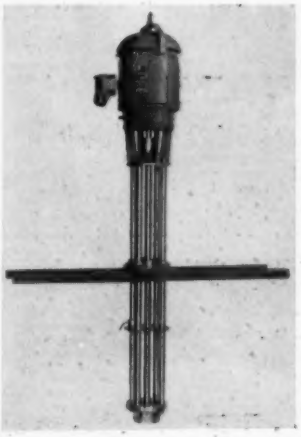

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Present day labor problems cannot be discounted especially with large cosmetic manufacturers. The progressive private label manufacturer considers himself a "partner" with his customer, his objective being to improve the product and lower the cost. Is it not farsighted for a cosmetic manufacturer to have a connection with a private label manufacturer so that if a fire or some other unforseen difficulty arises, the private label manufacturer can step into the breach and carry on until the emergency is over?

Paradoxical as it seems, it is not hard to make a rouge, cake make-up, lipstick, and similar items. Books are full of formulae, some of which are good. But to make a good product day after day, to maintain the shade, to know the idiosyncrasies of the different colors and materials, and to be able to manufacture at low cost, is something else. Again, referring to lipsticks, it requires three to five top-notch, experienced technicians to make good lipsticks at low cost. From actual, costly experience we have found out that if we give complete detailed instructions on how to make a product, even to a well set-up organization, they cannot produce successfully.

Probably the strongest argument against the private label manufacturer is that the $1.00 retail item is virtually the same as a 10c or 25c product. Basically the formulae are the same because the private label manufacturer would not knowingly put out an inferior article—it would not repeat. So, even though the 25c and $1.00 products are essentially similar, there is usually a difference. The $1.00 item is larger and invariably has a higher concentration of a much more costly perfume, and secondly, it is finished and packaged better. Just as General Motors basically puts out a Chevrolet which will give excellent performance, there are some refinements in a Cadillac.

The above dissertation to a great extent covers specialty items. There are quite a number of organizations which find it advantageous to have their complete line made up. These firms specialize in selling, promotional work, and packaging. If a concern's volume is fairly constant, without peaks or valleys, and if it has a low controlled overhead, it might be better off if they manufacture those items which cannot be bought better or cheaper.

It is our firm belief that even though a cosmetic manufacturer has faith in its private label manufac-

turer, if the firm can afford it, they should have a chemist or idea man to collaborate with the private label manufacturer.

The well operated private label manufacturer has dermatologists, medical advisers and a well organized group of testers on its staff. One concern has four different outside groups consisting of about 100 testers under experienced observers. Blind coded tests are carried on for days to many weeks before tangible results can be finalized. Intelligent testing is of utmost importance and must be done very correctly and scientifically.

Developing superior and, if possible, unique products is the very life-blood of a private label manufacturer. If they stand still, they are doomed. They must move forward. While the same holds true of the concern which has its own manufacturing and research staff, there is a question as to whether it is such a "live or die" attitude. Specifically, the cosmetic manufacturer-distributor can only give research part of his attention or spread his efforts over too many products. With a private label company, all of its thinking is concentrated on research, quality, control, price and service.

Yes, the cosmetic industry has indeed become more and more scientific and specialized. Failure to recognize this fact can result in a decline and the loss of business because no product is static—it must continue to improve. Clever packaging can go a long way, but superior, unusual quality and new ideas will always continue to ring the cash register.

The question which the reader must answer is: Can I manufacture specialties as good and at as low cost as a concern whose entire personnel concentrates on certain specialties? The presentation of the many details will enable the reader to assess his position in relation to the private label manufacturer.

## The Story of G-11

(*Continued from page 471*)

when mildew was one of the great enemies of the soldier fighting in the South Pacific, it was used, both alone and in conjunction with copper naphthenate (a synergistic use invented by R. E. Horsey of Sindar Corporation) on mosquito netting, tenting, tarpaulins, and numerous other materials which required resistance to rot and deterioration.

In the meantime, what of hexachlorophene? In the Givaudan laboratories, its bactericidal potency, both alone and in combination with soap, was established. It was found that it did not irritate the skin and was safe for external use, and seemed to have all of the properties and characteristics deemed desirable for an antiseptic that could be incorporated in soap and other materials and used without requiring medical supervision. A research and application program was then put under way which brought the material to the attention of medical schools, hospitals, and bacteriological laboratories, the latter to determine its specific killing power against various species of bacteria.


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The Givaudan organization began to make this new material known through its publications and through its management which was in direct contact with potential major users.

The first literature[2] appeared in the early months of 1941, and suggested the incorporation of hexachlorophene and dichlorophene in rubber goods, latex or textiles, to render these products antiseptic. However, the retention of the germicidal power of hexachlorophene, when incorporated into soap, had already been recognized, and patents covering this use were issued to Kunz and Gump in Argentina in 1941, England in 1942, and Canada in the following year. A United States patent application, which was filed in 1940, was recently allowed. The Court of Customs and Patent Appeals, reversing the findings of the patent office, found that the inventors Kunz and Gump had produced an entirely new and very useful composition of matter. Givaudan at this time is therefore in the final stages of becoming the holder of a U. S. patent on soaps containing hexachlorophene or other related materials, and after the patent issues, licenses will be required from the patent holder.

Tests carried out in 1942 at the Institute of Applied Research, Dayton, New Jersey, demonstrated that a soap containing two per cent of hexachlorophene produced a marked decrease of the number of bacteria introduced into superficial wounds of animals, as compared with the effect of ordinary soap.

At about the same time, a series of studies was undertaken by several physicians, particularly dermatologists, and by medical schools and hospitals. The results of several of these workers will here be summarized and it is remarkable that there did not appear a single dissenting voice.

It had been the contribution of P. B. Price, in the years just prior to the studies of the applications of hexachlorophene, to note that the bacteria on the skin consisted of two more or less distinct categories, the transient, that come and go with the ordinary contact of the skin with its environment; and the resident, which thrive on the skin over an indefinite period of time. Ordinary soap, Price contended, readily removes the transient flora, but far more slowly the resident bacteria. Finding a home in the deeper layers of the skin, the residents become difficult to reach, and are slow to be destroyed. Thus, even when the theory of self-disinfection was expounded, the need for better germicidal action was recognized.

The early work on the use of hexachlorophene was carried out by E. F. Traub, C. A. Newhall, and J. R. Fuller, at the School of Medicine of the University of Vermont, and was reported in the medical literature in 1944 and 1945. At that time, the studies were restricted to hexachlorophene in bar soap, in a proportion of two per cent, which was considered efficient, and which was found, in actual usage and in patch tests, to be non-irritating. Traub reported that the

[2] For a comprehensive summary of the literature, see Sindar Corporation Technical Bulletin 49-1 (July 1949), "Compound G-11: An Annotated Bibliography," and "Compound G-11—a supplementary bibliography."

bacterial population on the skin was not only low when the hexachlorophene soap was used regularly for one week, but that it was maintained at this low level if the soap was employed in the regular fashion, and he attributed this to the bactericidal effect of the compound on the resident flora. In other words, the beneficial effect of antisepsis was not the result of immediate action, but of prolonged and continuous action. The potentialities of the new soap for surgical scrub-up were recognized by Traub and his colleagues, and at the same time they suggested that the soap should find many hygienic applications in everyday life. In a later study, the same writers investigated the mechanism of the degerming action of the soap, and concluded that hexachlorophene, unlike quaternary ammonium compounds that are being used in skin disinfection, does not form a protective film over the skin, but actually reduces the number of pathogenic and non-pathogenic microorganisms.

Shortly thereafter, studies on the use of hexachlorophene for surgical scrub-up began to attract further attention, and a report was made of observations by C. V. Seastone, and later by Seastone and T. C. Erickson. On using in the scrub-up over a six-minute period a liquid soap containing one per cent of the new germicide, the reduction of the bacterial count from the normal skin count was about a thousand fold, whereas the conventional surgical wash for ten minutes reduces the flora count only about ten times. In addition, the scrubbing brush and strong germicidal rinses are unnecessary if the scrub soap contains hexachlorophene.

W. J. Fahlberg, T. C. Swan, and Seastone later postulated the theory that, in addition to retention of its antiseptic power in the presence of soap, hexachlorophene was so remarkably effective because a certain amount of the chemical itself is retained on the skin after the lather of the soap has been washed away. If this is true, as seems to be the case, a certain percentage of the new germs invariably deposited on the hands between washings would be prevented from multiplying.

This theory may account for the observation made on a football player, who had been using the antiseptic soap regularly and in a routine fashion in his home for about a week. At the end of this period, the young man came directly from the practice field, with visibly dirty hands, to the laboratory. A bacterial count was made, and it was found that there were less bacteria on his hands than on those of people who had been using ordinary soap but who were not exposed to the dirt and mud of the gridiron. This small bacterial count may have been due to the low amount of resident flora, and at the same time to the continued and continuous bactericidal action of the hexachlorophene that remained on the skin, in accordance with the theory of Fahlberg and his colleagues.

At several universities and hospitals, and under the supervision of surgeons, bacteriologists, dermatologists, findings similar in character were obtained, and new evidence accumulated on the efficiency of this

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new substance. H. J. Udinsky utilized the soap on a number of patients for a period of two years, reported no untoward reactions, and observed the low total skin flora on himself from regular and routine use. He recognized the possibilities that such a soap might have in lessening pyogenic skin conditions.

The utilization of the new material, in combination with soap, for the surgical scrub-up continued to attract the greater part of the attention of workers in the field, and those who studied it were almost unanimous in recommending the soap, although there were minor differences of opinion as to the best medium and the necessity of supplementing hexachlorophene with the usual and routine techniques. Thus, Price and A. Bonnett found reduction of the skin flora by continued use of the soap to be sufficient to enable them to conclude that such a soap, used rationally and faithfully, may contribute materially "to the perfection of aseptic surgical technique." W. J. Nungester, P. L. Thirlby, and A. B. Vial found the use of the soap superior to the routine ten-minute surgical scrub-up, but warned against following it with an alcohol rinse, as some of the hexachlorophene might be removed. This observation would seem to confirm the findings of Fahlberg, Swan and Seastone.

Further confirmation of the value of the hexachlorophene in surgery was made by D. G. C. Clark, J. S. Lockwood and E. Lewit, who used a two per cent solution in a liquid soap, in the surgical scrub, and found that it reduced the possibility of bacterial wound contamination following the puncturing or tearing of a rubber glove. Again, there was a warning that the residual hexachlorophene should not be washed from the hands before the gloves are worn.

At the same time, the possibility for enhanced efficiency in surgical use through the synergistic effect claimed for hexachlorophene when used with other materials was being investigated, and at least four independent reports confirmed that a solution of hexachorophene in a given synthetic detergent was safe, effective, time-saving, and reduced dermatitis often caused by the preoperative scrub-up.

Among many other scientific studies, we should like to mention the study of the use of a soap containing two per cent of hexachlorophene in an institution for the mentally deficient in Vermont. Fuller, Newhall, F. C. Thorne, and Traub reported that there was a considerable decrease in the incidence of serious pyogenic skin infections, and a decrease both in the number and in the severity of such infections as carbuncles, furuncles, and cellulitis.

All in all, there have been, to date, eighteen reports of investigations of hexachlorophene in the medical and bacteriological literature, and the efficiency and value of the material have been brought forward in all eighteen reports. This is in addition to numerous summaries, confirmations, and endorsements, that have appeared in hospital publications, the chemical and industrial press, and elsewhere, but which did not add original data.

The bactericidal action of hexachlorophene against a number of pathogenic organisms has been investigated by the Department of Bacteriology of a leading medical school, and it was found that this germicide shows specificity, being strongly active against gram-positive organisms and less active against gram-negative bacteria. In various types of skin infections, hexachlorophene may show specific bactericidal or, possibly, bacteriostatic activity, and be utilizable as a specific chemotherapeutic agent, or may prevent the spread of infection.

### Application and Commercial Exploitation

With such evidence being accumulated, the management of Givaudan foresaw the possibilities in this new material, for its use in surgery, in a regular toilet soap for institutions, restaurants, public wash rooms, the armed services and wherever the danger of infection is heightened; and, finally, for generaly use by the public in all toilet soap. Hexachlorophene was supplied to many parties interested for investigational use.

Many industrial enterprises made use of this opportunity and carried out independent product research, developing their own information on the potentialities of hexachlorophene for their purposes. The contributions of many of these companies, both in scientific work and in product research and development, were indubitably responsible for the great growth of commercial exploitation of the material in recent years. Without attempting to be comprehensive in our survey of current uses, let us mention the major fields of development:

1. *Surgical and other hospital use.* Hexachlorophene, either in a liquid or a solid soap, or in combination with a synthetic detergent, is utilized in many of the outstanding hospitals, for purposes already summarized. It is attracting greater attention at all times, and its acceptance is broadening. Many have predicted that, in due course, it will be used in all surgical preoperative preparations. A recent investigation has divulged that hexachlorophene is particularly useful for preoperative use in plastic surgery.

2. *Instrument sterilization.* Hexachlorophene in aqueous alcoholic solution, in combination with formaldehyde, was found to be an effective agent for cold sterilization of surgical instruments, thus avoiding steam autoclaving and dulling of the cutting edges. A similar solution without formaldehyde is useful in dental practice for the cold disinfecting of dental instruments.

3. *Shaving Creams.* Shaving creams, the use of which keeps the face surgically clean, and reduces the possibilities of infection from hair follicles and abrasions, were the first major, nationally-advertised products to contain hexachlorophene.

4. *Deodorant soap.* The Givaudan organization was aware of the antiseptic value of their hexachlorophene in soap, and in view of the theory that unpleasant odors of the human body are to a large extent caused by the bacterial decomposition products of perspiration,


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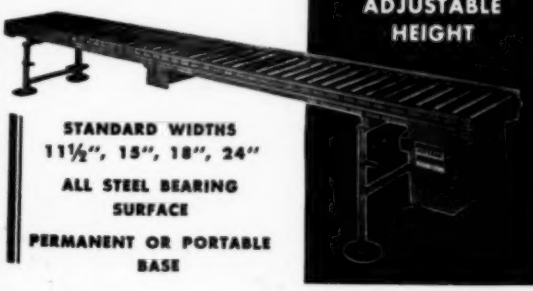

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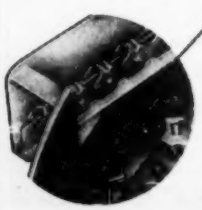

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it was seen that such a soap would have deodorant powers. The commercial possibilities of such a deodorant soap were recognized by a large soap manufacturer, whose product was quickly and enthusiastically received by the public on a national scale.

The Committee on Cosmetics of the American Medical Association has found that deodorant soaps containing hexachlorophene seem to have a potential for controlling perspiration odor to a degree beyond that of other types of soaps, and that they compare favorably with ordinary toilet soap from the viewpoint of pharmaceutic elegance or safety.

5. *Industrial soap.* Liquid or bar soaps containing hexachlorophene are used in industries where there is aggravated danger of infections due to the type of materials handled. They are recommended particularly for the prevention of secondary infections which often follow a dermatitis caused by cutting oils. Also for handlers of food in restaurants and public institutions, and beauty parlor and barber shop operators, among others, use of an industrial soap containing hexachlorophene is indicated.

6. *Deodorants.* In addition to its use in deodorant soaps, hexachlorophene is utilized in a variety of other cosmetic-type products in which its antibacterial and deodorant qualities are desired. These include colognes, cologne sticks, creams, hand lotions, dusting powders, among others.

7. *Baby products.* Hexachlorophene is used in a number of major products for care of infants' skin, including lotions, oils, and powders. It is claimed that one lotion containing hexachlorophene is a "highly effective agent in the prevention and treatment of miliaria, intertrigo, diaper rash, impetigo, excoriated buttocks, and similar skin affections of infancy," and that it "is excellent for general cleansing and lubrication of the integument."

8. *Veterinary products.* Hexachlorophene is incorporated into a veterinary preparation used for the treatment of mange, in order to prevent secondary infections caused by gram-positive organisms. Hexachlorophene, however, is not specific to the mange itself.

## Industrial Expansion

As these uses were being developed and as products in which hexachlorophene was incorporated were receiving rapidly growing public acceptance, Sindar and its parent company, The Givaudan Corporation, found it necessary to meet the ever-increasing demand for hexachlorophene by building new and greatly expanded manufacturing facilities at Delawanna, N. J. This industrial expansion was planned with foresight and full recognition of the constantly broadening applications visible on the horizon, and Sindar's recently completed production facilities are now believed to be sufficient to meet the foreseeable requirements of the American market.

(*Continued on page 572*)

## Patent Thoughts and Trends

(*Continued from page 529*)

activity against experimental infection in mice due to Streptococcus hemolyticus, D. pneumoniae, K. pneumoniae, S. typhosa and other organisms. Terramycin possesses definite antirickettsial activity in the embryonated hen's egg, and in high concentrations it inhibits the infection of the chick embryo with the PR8 strain of influenza A virus.

Because of the unknown chemical configuration of Terramycin, the patentees have recited the physical and chemical properties of the substance to identify it for purposes of the patent claims. In this connection, claim 9 is illustrative:

A substance effective in inhibiting the growth of Gram positive and Gram negative bacteria, selected from the group consisting of an amphoteric substance capable of forming salts with acids and metals, that is sparingly soluble in methanol and substantially insoluble in water and in ether, whose dihydrate contains the elements carbon, hydrogen, nitrogen and oxygen in the following proportions:

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and may possess a crystalline form consisting of thick, six-sided plates having the following refractive indices:

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and a suspension of whose dihydrate in mineral oil exhibits characteristic absorption in the infra-red region of the spectrum at the following frequencies expressed in reciprocal centimeters: 3580, 3470, 3350, 3060, 1652, 1625, 1592, 1318, 1280, 1242, 1122, 1090, 1076, 1054, 1033, 1007, 938, 863, 840, 775, 708, 679, and the acid and metal salts of said substance.

### RECENT PATENTS

*2,505,645*—**Winthrop Stearns—Hydroxylated Alpha, Beta-Diphenyl-Beta-hydroxy Ethylamines, Analgesics.**

*2,505,681*—**Geigy—Miticides: Amides of alphabeta-unsaturated carboxylic Acids.**

*2,505,811*—**J. Szuecs—Essence of Mushroom.**

*2,505 834*—**Merck—Penicillenic Acid G and Esters.**

*2,506,345*—**Am. Cyanamid—Separation of live viruses from nonviral Protein Matter.**

*2,506,696* — **E. R. Squibb — d-alpha Penicilloates.**

*2,506,786*—**Burroughs Wellcome — Aminopurine Lactates.**

*2,506,975*—**Lankenau Hospital—Cystathionine Synthesis.**

*2,507,128*—**National Lead Co.—Deodorants containing zirconium carbonate.**

*2,507,193*—**Bristol Labs.—Injectable Pencillin.**

*2,507,337*—**E. Bilhuber—1,5-Dialkyl Tetrazoles.**

*2,507,473*—**Smith, Kline & French—Coumarans. Intermediates for Morphine-like Compounds.**

*2,507,543*—**U.S.A.—Myrcene from Beta-Pinene. Vapor phase, high temperature (580°-750°C) and short reaction period (1/1000 second).**

*2,507,631*—**Ciba—Pyridine & Piperidine Compounds.**

*2,507,829-33*—**Sandoz—Alkyl Sulfon-**

(*Continued on page 574*)


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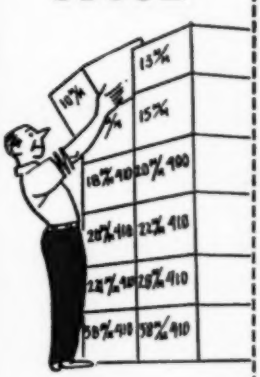

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## The Story of G-11

*(Continued from page 570)*

### Conclusion

There is every reason to state that hexachlorophene has lived up to its early promise as a factor in protecting public health, aiding individual comfort and sanitation, and preventing the spread of certain types of infections. Its further public and private use is indicated, and new studies that are now proceeding or that will get under way in the near future may very well show new possibilities in different products, for a variety of purposes, or in combination with other materials in which its effectiveness may be enhanced. That it can already be considered one of the outstanding developments in the modern soap and cosmetic industries can be stated without reservation; that it may prove to be of major importance in external chemotherapy may become equally apparent in the future.

---

## Management Forum

*(Continued from page 523)*

### Container Tester

L. O. Koven & Brother, Inc., Jersey City, N. J., has manufactured a fatigue tester for the testing of loaded paperboard, fiberboard and wooden shipping cartons and boxes.

The testing machine has a vertically mounted, revolving drum, consisting of a hexagonal-shaped testing chamber supported by two flanged steel heads, mounted on an I-beam base. The body sections are made of 3" thick dressed fir (the inner surfaces are polished to a bright, smooth finish), on which are mounted specially designed eccentric, oak tumbling baffles or hazards. The unit is motor driven through a speed reducer and gears mounted on the integral I-beam base. An automatic counting device, mounted on the base and tripped by pins located opposite each baffle, indicates the number of times a carton drops from one baffle to the next.

The tester is built in two models for handling small-medium and medium-large size containers, respectively. Model A, having a 7-foot diameter testing chamber and occupying a space 6'6" wide by 7'6" long by 8'3" high, is capable of handling containers up to 20" x 20" x 20" in size and not exceeding 250 lbs. in gross weight. Model B, having a 14-foot diameter testing chamber and occupying a space 13'3" wide by 15'3" long by 16'6" high, is capable of handling containers having a length of over 20" and up to about 72", and weighing up to 1000 lbs. gross. Tests are made at speeds of 1 5/6 r.p.m. for Model A and 1 r.p.m. for Model B.

Test procedures are established that will indicate:

1. The ability of a container to withstand various shocks and impact stresses simulating those which may be expected in handling and shipping.

2. The ability of packing and carton designs to protect the contents when subjected to such shocks and stresses.

*(Continued on page 575)*

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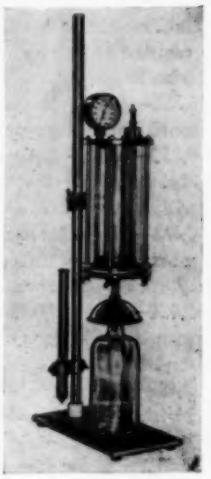
♦ Here are two practical units with a high degree of flexibility for handling small volumes of liquid. Can be used with cloth, paper, asbestos pads or other filter medium.

♦ Standard 2800 cc model at right consists of Pyrex glass cylinder, with all metal parts (except pressure gauge) which contact liquid made of stainless steel.



Standard 2800 cc Lab Filter

100 cc Pressure and Vacuum Filter

♦ Standard 100 cc 60 mm diameter laboratory filter at left has blown Pyrex glass body. Removal of pressure plug converts filter to suction type.

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## Patent Thoughts and Trends

*(Continued from page 571)*

ic Acid Salts of Dihydro-Ergocornine and related compounds.

*2,507,883*—S. Blackman — Pharmaceutical machine for delivering predetermined amounts of pills, tablets and the like.

*2,507,925*—J. B. Niederl & Associates —Nicotinium alkyl sulfates.

*2,508,332*—Ciba—Beta-Phenyl, Beta-Pyridyl and Beta-Phenyl, Beta-Piperidyl Ethyl Amines.

*2,508,388*—G. A. Breon & Co.—2-(p-Nitrobenzene - sulfonamido) - Thiazole Retention Enema.

*2,508,422*—Parke, Davis—Quaternary Ammonium Halides of Amino Benzhydryl Ethers.

*2,508,457*—Merck — 3 - Keto - 4 - Acylamido - Tetrahydro - thiophene

*2,508,471*—Merck—$\Delta^{3,4}$-3,11-Diketo-17,20-Dihydroxy-Pregnanes.

*2,508,499*—G. D. Searle—Amino Cyclohexyl Ethers.

*2,509,010*—Commercial Solvents — Solvent Extraction of Penicillin Culture Liquors.

*2,509,055*—Squibb—Fractionation of Mixtures of Penicillin Containing Penicillin-K.

*2,509,191*—Squibb — Therapeutic: Sulfonamides plus Streptomycin.

*2,509,198*—Abbott Labs—Mercury-, Silver-, and Gold-Mercapto Carboxylic Acids.

*2,509,199*—Abbott Labs.—S. Pharmaceutical Intermediates.

*2,509,200*—Abbott Labs.—Monosodium Salt of Gold Thioitamalic Acid.

*2,509,201*—Abbott Labs — S-Carboxyalkylene Isothiuronium Salts of Antimonyl Tartrate.

*2,509,233*—Monsanto — Emulsifiable Oil Concentrates of Biological Toxicants.

*2,509,248* — Merck — Preparation of $\Delta^{9,11}$-3(alpha)-Hydroxy 17-Keto-etio-cholene.

*2,509,309*—Soc. Usines Rhone-Poulenc—Preparation of Ephedrine.

*2,509,386,7*—R. Adams—Dibenzopyran Marihuana-like Compounds.

*2,510,047*—May & Baker—Diamidine of 2-Hydroxystilbene.

*2,510,164*—U. S. A.—Fortifying food with Anti pellagra factor (water-insoluble derivatives of nicotinic acid).

*2,510,428*—Goodrich — Bactericidal and bacteriostatic Preparations Containing 2,3-Diaryl Indoles.

*2,510,495*—G. A. Breon & Co.—Composition for Ulcerative colitis.

*2,510,510*—Economics Lab.—Silver-containing glassy germicidal detergents and water softeners.

*2,510,696*—U. S. Rubber—Fungicidal Composition. Contains a 4,5-Pyrazoledione—4—oxime.

*2,510,724-6*—U. S. Rubber Co.—Germicides: 3, 5-dimethyl-4-nitrosopyrazole, 3-phenyl-2, 4-thiazoledione, and 1-(4-Sulfamylphenyl)-3 ,5-dimethyl-4-nitrosopyrazole.

*2,510,738-40*—Abbott Labs—Mercapto Derivatives.

2,510,946—Wallace & Tiernan—Undecylenic Acid and Undecylenate Antimycotic Composition.

2,510,993—F. Meyer & C. Neuberg—Soluble Sulfadiazine-Alkali Salicylate Compositions.

2,511,011—Syntex—Pseudodiosygenin Process.

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## Management Forum

(*Continued from page 572*)

5. Comparison of different designs of containers of the same size and carrying the same load.

### Portable Straight Line Vacuum Filler

Realizing the need for a medium size, portable, versatile filler for those handling a large variety of products in many different sizes of containers up to quarts in glass or tin, the Scientific Filter Co. has introduced their new Model SF Vacuum Filler. This new machine is a companion to their bench and portable type Fillers now in wide use for the past 25 years.

The Model SF Filler provides many of the features of the larger, semi-automatic Vacuum Fillers. It is equipped with a self-contained Vacuum Unit which fills bottles directly from supply container on the floor thus eliminating the need of overhead storage tanks.

Both vials, miniatures, petite containers of all types, sprinkler top bottles, and all kinds of glass or tin up to quarts can be easily handled by this versatile filler. Only one operator is required for maximum production. Extension table can be used for capping operation. The machine is simple, troublefree, easily operated all day long without fatigue.

Spouts are fully adjustable and change-overs take but 5 minutes as all liquid contact parts are self cleaning.

The Model SF handles all types of liquids, light or heavy. It is a general, all purpose unit for moderate requirements or as an auxiliary machine where automatics are available but tied up in use.

Moderate in price, any plant can afford it. This versatile filler is manufactured by Scientific Filter Co., 14 Franklin Square, New York City 7, N. Y.

### Freeze-Drying Unit

The Stokes Model 203-L Freeze Drying equipment is a small compact unit which provides the highest output at lowest equipment cost for a rated total capacity of 3600 milliliters. It is valuable for general research purposes, and small scale production of guinea pig complement, cultures, serums, vitamins, and other biologicals.

Drying and freezing are done in a tank at the top of the chamber on an electrically heated and thermostatically controlled drying shelf.

The equipment is complete with Stokes McLeod vacuum gage and Stokes No. 146 high vacuum pump. A stainless steel dry ice condenser finger prevents water vapor from reaching the vacuum pump. Freezing is observed through a sight-glass in the lid of the freezing unit.

Model 203-L can also be supplied with chemical desiccant in place of the dry ice equipment, or with both, to take advantage of the low cost desiccant method or the higher capacity dry ice method.

Full details may be obtained from F. J. Stokes Machine Company, 5900 Tabor Road, Philadelphia 20, Pennsylvania.


KOMMON/ SCENTS!

It was a simmering summer: President Truman established a beachhead at a Marine Corps Convention; New York's Mayor O'Dwyer forgot he had resigned and took a vacation anyway, and Russia returned to the U. N. Securitly Council with deep cooperation and Malik aforethought.

•

Then, of course, Tom Dewey decided to run for Governor of New York State, again, despite his health. After his convention acceptance speech, some listeners suspected his bursitis came from patting himself on the back.

•

Sorriest looking politician in the November field is Rep. Vito Marcantonio. With a three-party coalition candidate running against him, Marcantonio has less chance of returning to Congress than Stalin has of being appointed to the College of Cardinals.

•

Marcantonio's chances are so slim, if he got reelected even his amazed supporters would probably demand a recount.

•

Most unusual news story of the summer concerned Lee Pressman's confession that he was once a Communist. It came as a complete surprise to an illiterate hermit in the Mojave Desert.

•

Most charming story featured a fist fight in Congress between two gentlemen over 65. They should earn a fortune writing testimonials for Wheaties. (Well, then Serutan!).

•

And in the Cosmetic Industry, tycoon and buffoon alike, impressed by the new market in pressure propelled products, were walking on air. To be more exact, they are floating on aerosol, hoping to establish a new ceiling above excess profits tax.

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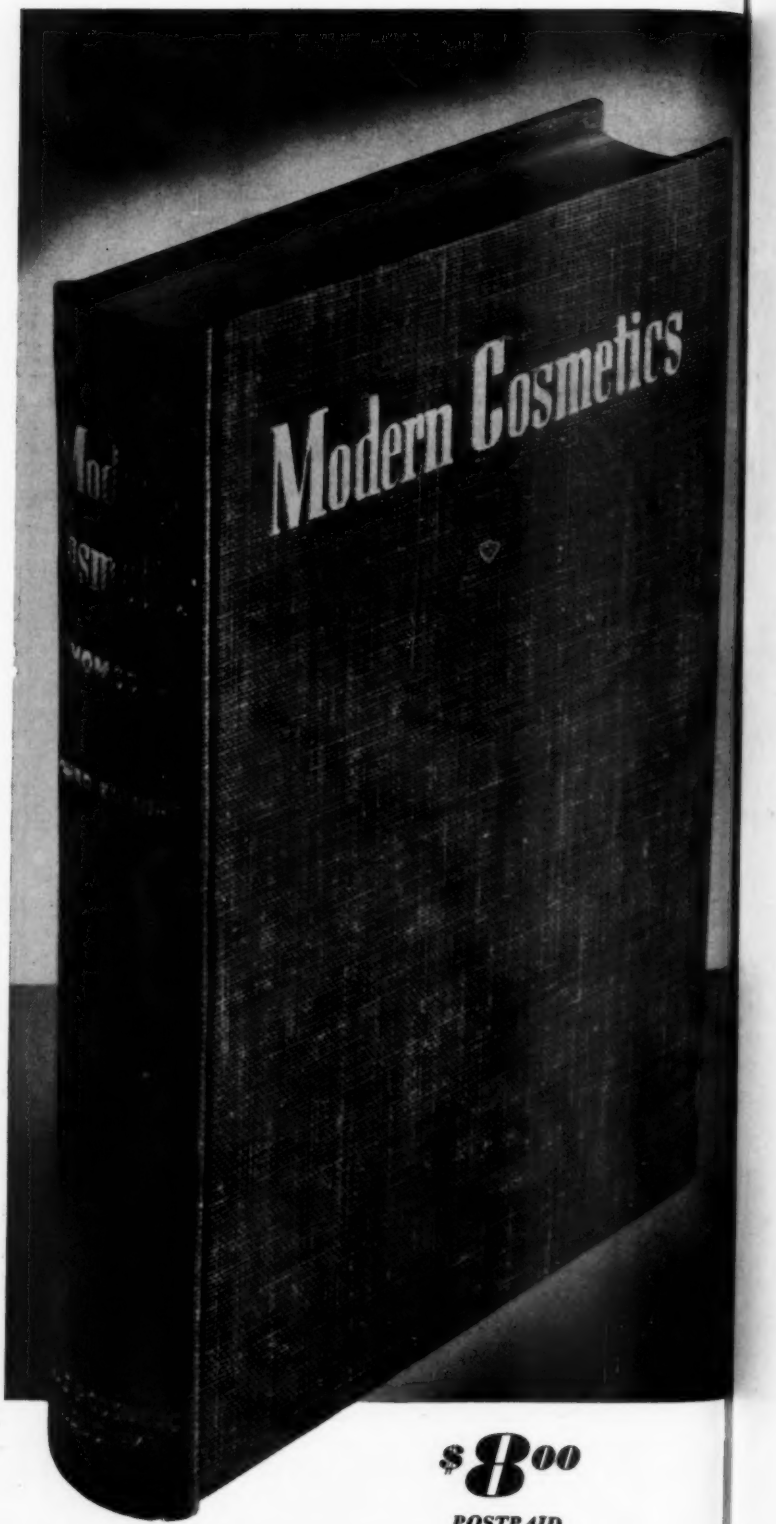


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The following formula is a modification of a product which has had extensive trial and has proven highly satisfactory, reasonably cheap and which requires no special equipment and is quite elegant cosmetically.

| | | |
|---|---|---|
| **Stearic acid** | **10.0** | **per cent** |
| **Beeswax** | **2.0** | **" "** |
| **Petrolatum** | **4.5** | **" "** |
| **Triethanolamine** | **1.5** | **" "** |
| **Glycerine** | **8.0** | **" "** |
| **Water** | **54.0** | **" "** |
| **Magnesium stearate** | **20.0** | **" "** |

Melt the wax and oil constituents together at about 60°C., heat the water, glycerine, and alkali together to the same temperature, mix and thoroughly emulsify both solutions and stir until cold. Grind the solid barrier material with the cream at room temperature, preferably in a colloid mill.

*STYPTIC SOLUTION: Please forward a suitable formula for a styptic solution containing alcohol for easier penetration. Washington.*

Frankly, I question the value of the alcohol in such a product, since it will probably do more to irritate the tissue than to improve the action of the preparation. As a matter of fact, I have not been able to find one formula which includes alcohol. However, you may be interested in the following preparation, a so-called styptic water, as described in "The Pharmaceutical Recipe Book:"

| | |
|---|---|
| **Alum** | **30 Gm.** |
| **Zinc sulfate** | **30 Gm.** |
| **Rose water, a sufficient quantity to make** | **1000 cc.** |

Triturate the salts together and dissolve in the rose water, allow to stand for two days and filter.

*DRY DOG SHAMPOO: Can you give me a formula for a dry dog shampoo? Chicago.*

The following is a typical formula for a dog shampoo, and it is said to be especially suitable for young puppies:

| | |
|---|---|
| **Starch** | **75 parts** |
| **Silica Gel** | **10 "** |
| **Borax or sodium bicarbonate** | **10 "** |
| **Pyrethrum powder or paradichlorbenzol** | **5 "** |
| **Add 1 per cent perfume compound** | |

The powder is dusted over the fur of the animal after which a thorough brushing and combing is necessary to remove the powder. The resulting cleansing and disinfecting of the fur is reasonably thorough, but obviously does not extend to the skin itself.


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